ORGANISATIONAL EXCELLENCE IN THE PUBLIC SECTOR

WITH SPECIAL REFERENCE TO THE PORTUGUESE LOCAL GOVERNMENT

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ABSTRACT

The primary aim of this thesis is to analyse the key drivers of Organisational Excellence in the Public Sector and integrate them in a comprehensive, reliable and valid performance measurement system.

Within the movements for Public Sector reform and modernisation, Total Quality Management (TQM) has increasingly been regarded as a way to improve efficiency and effectiveness in the use of the resources available, deliver better public services, and bring Public Administration closer to its customers and citizens. However, too often the initiatives carried out are not integrated, nor they are part of a systematic and coherent strategy to guide public organisations towards Organisational Excellence (OE).

The literature suggests that adopting TQM can lead to superior performance, in spite of the difficulties of statistically demonstrating such link. There is also a prevalent view that TQM principles and core concepts are universally valid, but need to be adapted to each context in particular. In this sense, they are applicable to the Public Sector, although the existence of multiple stakeholders, the need to balance individual customer needs with wider collective purposes and the strong bureaucratic inheritance make their implementation particularly challenging.

The exploratory survey conducted in the Portuguese municipalities – which constitute the focus of our study – revealed that TQM is raising considerable interest and diagnosed the main barriers and motivations for TQM implementation. Moreover, it gave support to the Critical Success Factors (CSFs) identified in the literature.

Several organisational excellence models were reviewed. It is argued that Kanji's Business Excellence Model (KBEM) adequately covers the CSFs identified and, additionally, provides a sound methodology – based on the Structural Equation Modelling (SEM) approach and the Partial Least Squares (PLS) technique – to estimate the relationships between them and determine their impact on an aggregated measure of OE.

To measure OE from the internal stakeholders' perspective, a few adjustments were made on KBEM and new scales developed to assess the Local Government's performance in each CSF. The model was empirically tested and validated using data collected from 85 Portuguese municipalities and the internal OE index calculated.

Given the critical role of Leadership (the prime of KBEM), this construct was analysed in detail. The key leadership requirements in an organisation committed to TQM and OE were identified. A model was then developed and used to measure, according to leaders' and staff members' views, Leadership Excellence in the Portuguese municipalities.

With the purpose of evaluating OE from the external stakeholders' perspective, a Business Scorecard (KBS) was created. Feedback from citizens – the key external stakeholders of a municipality – was collected in each dimension of the scorecard. Using similar procedures, the model was validated and the scores for each latent variable computed. The OE index thus calculated drew attention to possible gaps between internal and external perceptions and called attention to the need of measuring OE from different angles.

The system of performance measurement proposed is grounded in the CSFs identified and assesses performance from a multiple perspective by integrating feedback from the various stakeholders of an organisation. Therefore, it provides a more realistic assessment of performance and is expected to support the Local Government in its quest for Organisational Excellence.

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Glossary of key acronyms

BSC	Balanced Scorecard
CFA	Confirmatory Factor Analysis
CSFs	Critical Success Factors
EFQM/BEM	European Foundation for Quality Management Business Excellence Model
LEI	Leadership Excellence Index
LG	Local Government
KBEM	Kanji's Business Excellence Model
KBEMS	Kanji-Business Excellence Measurement System
KBS	Kanji's Business Scorecard
K&W	Kanji-Wallace Management Software
MBNQA	Malcolm Baldrige National Quality Award
OE	Organisational Excellence
OEI	Organisational Excellence Index
PLS	Partial Least Squares
PMS	Performance Measurement System
QSPS	Quality System for Public Services
SEM	Structural Equation Modelling
TQM	Total Quality Management

CHAPTER 1. INTRODUCTION

As the title suggests, this research analyses the main drivers of Organisational Excellence in the Local Government. The following chapters will critically review relevant literature on the subject, explain the methodology adopted to build, test and validate the frameworks used to measure Organisational Excellence, and report the main results of their application to the Portuguese municipalities.

In the Introduction, to put this research into context, the characteristics and emergent issues that dominate the study of the Public Sector, in general, and of the Local Government, in particular, are briefly discussed. With the aim of getting an overall understanding of the Portuguese case, on which our study is focused, the system of Local Government in Portugal is described and identified the key challenges it currently faces. Next, the research purpose and relevance are explained and the questions it intends to address specified. To conclude, the outline of the thesis is presented.

1.1. THE PUBLIC SECTOR CONTEXT: CHARACTERISTICS AND EVOLUTION

Establishing what constitutes the Public Sector is not always easy. Farnham and Horton (1999) identify as private organisations those "created by individuals or groups for market purposes", while public organisations are "created for primarily political and welfare purposes". Nevertheless, as the same authors acknowledge, behind this *pseudo* simple distinction, grey areas exist in most countries.

Extensive literature discusses the potential distinctiveness of the Public Sector. Among the particularities usually identified are those of the diversity of their goals (Farhham and Horton, 1999), (political) nature of organisational constraints, and existence of multiple stakeholders with conflicting demands (Rouse, 1997).

Lawton and Rose (1991) provide a good summary of the features usually regarded as unique of public sector organisations:

- They usually do not operate in a competitive market environment;
- Their objectives are generally ill-defined and vague;

- They are subject to greater and more open accountability;
- Their functions are limited by statute;
- They are essentially funded from taxation;
- They sometimes provide services that would not be provided otherwise.

It is often argued that recent transformations, especially those concerned with the introduction of business-like management practices, have increasingly blurred the boundaries between public and private organisations (Farnham and Horton, 1999), although most researchers recognise the importance of taking into consideration distinguishing public sector values (Guyomarch, 1999; Kellough, 1998; Rouse, 1999; Sanderson, 1994).

From the 1970s, and specially since the 1980s, management reforms have been seen as offering mechanisms for overcoming the deficiencies of the traditional bureaucratic model of Public Administration, characterised by "the presence of a system of rational rules and procedures, structured hierarchies, formalised decision-making processes and advancement based on administrative expertise" (Parker and Bradley, 2000), and increasingly regarded as inefficient, inward-looking, fragmented and increasingly incapable of satisfying service user needs and demands in a progressively more uncertain and turbulent context (Kirkpatrick and Lucio, 1995b; Lawton and Rose, 1991).

Reasons for the failure of the 'old' Public Administration paradigm seem to be essentially associated with its lack of flexibility and responsiveness, given the strong statutory and legal constraints (Parker and Bradley, 2000), the administrative complexity, the emphasis on routine and predictability (Ingstrup and Crookall, 1998), and the reduced autonomy of public sector managers to make decisions and be accountable for them.

General pressures for change mainly include: growing resource constraints, changing expectations, and demands for greater accountability.

The movements associated with the reforms are diverse – 'reinventing government' (Osborne and Gaebler, 1992) 'new public administration' (Frederickson, 1996), 'new managerialism' (Rouse, 1999), 'new public management' (Sanderson, 1994) – and not always consistently defined in the literature (Farnham and Horton, 1999). Their roots are also various (Araújo, 1999; Hood, 1995; Hughes, 1998): economic rationalism, public choice theory, new institutionalism, principal-agent theory, etc.

As it would be expected, public sector reforms have been pursued differently in various countries, according to national contexts and respective institutional shaping (Guyomarch, 1999). In many countries, with a particular emphasis to the UK and USA, the adoption of market mechanisms to enhance competition and public choice was seen as the main dimension of public sector change. At some extent, bureaucratic rationality was replaced by market rationality (Boland and Silberg, 1996; Reed, 1995). In other countries, the arrival of new public management elements occurred later and on a smaller scale.

Thus, some ideological and practical differences between the approaches followed are visible and mainly reflect:

- different emphasis placed on the individual customer *versus* the citizen as a member of a community and on political *versus* managerial accountability;
- distinct conceptions of the Government role and of the importance of social equity concerns; and
- divergences about the potential superiority of private sector management techniques.

Yet, reforms in rather diverse countries such as the UK, the USA, Australia, France, Germany, Sweden, Spain and Portugal share some key features (Araújo, 1999; Farnham and Horton, 1999; Frederickson, 1996; Hoque and Moll, 2001; Hood, 1995; Hughes, 1998; Ingraham, 1995, Ingstrup and Crookall, 1998; Kellough, 1998; Parker and Bradley, 2000; Sanderson, 1994):

- stress on greater discipline and parsimony in resource use;
- customer orientation;
- new forms of service delivery (decentralisation, contracting-out, public-private partnerships);
- fragmentation of Public Administration into networks of small-units;
- some degree of separation between policy formulation and implementation;
- performance orientation;
- managerial discretion and increased accountability for results;
- improved responsiveness through decentralisation of authority and empowerment of managers, public servants, customers and citizens;
- new technology adoption.

Initiatives consistently intend to achieve greater flexibility, to increase responsiveness, and to make public organisations more effective and efficient.

However, the consequences of the reforms taking place in the public sector are controversial. Some researchers have found improved performance and accountability to be associated with performance management and review (Parker and Bradley, 2000; Korac-Kakabadse and Korac-Kakabadse, 1998). Conversely, other researchers have highlighted the lost of accountability resultant from contracting (Kellough, 1998; Smyth, 1997), the democratic deficit of appointed management boards, and the decline in job satisfaction and increase in occupational stress among managers and public sector servants derived from some managerial practices. Several studies also suggest that performance is not necessarily improved by increased competition and indicate that there are significant costs in applying private sector management techniques in public organisations. Moreover, fragmentation raises co-ordination problems (Araújo, 1999). It is also argued that the politics/administration dichotomy, underlying the assumption of separation between policy formulation and policy implementation, is conceptually and intellectually naive (Kellough, 1998).

When discussing the adoption of management techniques associated with the new management paradigm, many have questioning the potential conflict with the attitudes, values and culture of the Public Sector. Criticisms are particularly high in stages of the reform when the emphasis is on cost cutting and efficiency in detriment of quality service delivery (Rouse, 1999). In these occasions, equity may be compromised while efficiency is increased, and fairness and accountability may be in danger when rules and regulations are removed (Kellough, 1998).

Despite the ongoing debate and the ideological arguments at stake, one possible way of addressing the contradiction is by looking at public sector organisations at two different levels: strategic and operational. In this sense, Millar (1998) analyses the private *versus* public sector opposition from a macro- and a micro-level. At the macro-level, in terms of the overall purposes, statutory obligations and political nature, differences are substantial; but at the micro-level, in terms of operational procedures, similarities make many practices transferable from the private to the public setting (and *vice versa*). The same view is shared by Nielsen and Høst (2000), who argue that differences diminish considerably if we think in terms of tasks rather than overall purposes. Recognising the existence of these two

distinct levels is also consistent with the tendency in many public organisations to separate the policy development role from the service delivery role, the later being subject to market or quasi-market mechanisms.

Table 1.1 provides a summary of some of the Public Sector transformations (Araújo, 2001; Gonçalves and Monteiro, 1999; Ingraham *et al.*, 2000):

Table 1.1 Shifts in the Public Sector

Since the late 1980s, Quality also started to dominate political discourses, emerging as a recurrent concern in every effort to transform, innovate and modernise the Public Sector. Government programs, in different countries and from distinct ideological backgrounds, consistently show that Quality Management is regarded as an important approach for delivering better, more economic and more citizen-oriented public services.

A tendency observable in the Public Sector compatible with the Quality Management philosophy is that of introducing Citizen Charters. As Rowley (1998) highlights, charters essentially are contracts between the service provider and its customers and constitute public statements of the standards citizens have the right to expect. They are a manifestation of the shift of power from service providers to service users. By making service standards explicit and visible, Citizens Charters make public organisations more accountable (Lawton and Rose, 1991), while citizens see their rights of consultation, information and redress explicitly recognised.

Portugal was not immune to all these changes (Araújo, 2001). Tendencies of reform, initiated in the 1970s (Lampreia, 1997), but suffering from a lack of consistency and co-ordination that resulted in only punctual changes, were accentuated in the 1990s. Financial pressures, associated with the need to comply with EU and single currency membership criteria, contributed to many changes. But other political aims, such as encouraging citizen participation and strengthening democracy, also played an important role.

As expected, the bureaucratic model dominated (and, at some extent, still does) the Portuguese Public Administration (Araújo, 2002). To overcome its deficiencies and to promote better service provision and more accountability, several initiatives were carried out, some of them with a clear inspiration in the New Public Management movement (Bravo and Vasconcellos e Sá, 2000; Araújo, 2001).

Three main goals guided the reforms (Araújo, 2002):

- to provide better public services;
- to increase the level of education and training of public servants; and
- to improve the use of the available resources, raising efficiency and efficacy.

With the aim of supporting the shift from a self-centred Public Administration, authoritarian and focused on administrative and legal procedures, to a Public Administration concerned with and closer to the citizens it serves (Lampreia, 1997), the Secretariat for Public Administrative Modernisation was created in 1986 and placed under the direct dependence of the Prime Minister. As a sign of the more embracing character of the transformations, Quality replaced the outdated concept of *disbureaucratisation* as the top priority (Araújo, 2002).

Successive Portuguese governments stressed their commitment to invest on Quality by setting up programs to train and educate public servants, renovate public institutions and change the mentalities (Gonçalves and Monteiro, 1999). To further reinforce the message, Portugal, as many other countries around Europe, introduced in the 1990s Quality Awards for Public Services, according to the structure of the model proposed by the European Foundation for Quality Management (EFQM).

The Quality Programme initiated in 1993 sets three main targets: transparency, simplification and participation (Araújo, 2001).

An essential element of the Programme is the Quality Charter, approved by the Council of Ministers in 1993. It explicitly mentions that citizens are the main judges of public service quality and acknowledges the importance of delivering "value for money". Public agencies and Local Government organisations are equally encouraged to implement their own quality charters (Araújo, 2002).

At the same time, an Ethical Public Service Charter was created, establishing the obligations and responsibilities of public servants regarding quality, competency, courtesy, information and dedication (Araújo, 2002).

Administrative modernisation initiatives, like the ones that were recently introduced in Portugal (see Law-Decree no. 135/99), fit well into the principles of Total Quality Management, by stressing (Gaster, 1996):

- local empowerment and control;
- simplicity and single access;
- sensitivity and responsiveness to local differences;
- multi-agency coordination of services, local partnerships and networks;
- devolved policy and decision making.

Overall, the Portuguese project of administrative modernisation simultaneously requires and promotes a change from a "defensive administration" to a "participative administration" (Lampreia, 1997).

In this regard, improving the accessibility of public services is a major concern. As Bravo and Vasconcellos e Sá (2000) highlight, until the moment, the more visible effects of the modernisation efforts are on the use of new technologies and on changing the way citizens interact with Public Administration. A modern and user-friendly database – INFOCID – was set up to improve citizens' access to relevant information on administrative procedures, formalities, and their rights and obligations as Public Administration clients. As a result of IT introduction, red tape was reduced and administrative transparency increased (Araújo, 2002).

Another good and very popular innovation example is that of the Citizen's One-Stop Shop (1st Quality Conference for Public Administrations in the EU, 2000), which brings formerly decentralised services together in a joint location from which all activities are coordinated, thus improving citizens' accessibility and convenience (Araújo, 2001). A

similar concept is behind the creation of Business Formalities Centres which made it easier and much quicker the process of establishing a new enterprise (1st Quality Conference for Public Administrations in the EU, 2000).

Studies on the impact of the changes implemented are so far rare. Nonetheless, an early report from the Commission for Quality and Rationalisation in Public Administration (Araújo, 2002) shows that citizens regard as positive the evolution in courtesy, competency and initiative. There is, however, a common belief that more fundamental transformations, which necessarily require the commitment of both political leaders and public managers, as well as the introduction of reinforcement mechanisms, have to be carried out to increase the pace and effectiveness of the reforms.

All in all, changes in Public Administration created an atmosphere favourable to public services assessment and made performance measurement a priority. A clear indication of this is the publication, during the Portuguese Presidency of the EU in 2000, of the Common Assessment Framework (CAF), which intends to constitute a simple and easy-to-use support for conducting self-assessment of public sector organisations across Europe (CAF, 2000). In line with our research, the framework clearly stresses the importance of understanding and using quality management techniques, thus conveying the message that the success and future of Public Administration is inevitably linked to the adoption of Total Quality Management (TQM) principles and concepts.

1.2. LOCAL GOVERNMENT: CHARACTERISTICS, CHALLENGES AND STRATEGIES

Given the size, diversity and complexity of Government, most countries find it necessary to decentralise their Public Administration, arranging services to be provided and decisions to be made locally (Byrne, 2000).

According to Byrne (2000, p.2), "local government is self-government involving the administration of public affairs in each locality by a body of elected representatives of the local community known as the local authority (or council)".

Both economic and political reasons justify Local Government existence. Economically, it provides a wide range of services – in spite of many differences in this regard among EU members (Norton, 1991) – and is a major source of employment, both directly and indirectly, mobilising vast resources. Politically, it reflects the concerns and views of local communities and represents a major opportunity for citizens' participation in the political system (Donelly, 1999; Sanderson, 1992; Stoker, 1991). Moreover, it has an important role as a "builder of community pride" (Donelly, 1999).

Thus, the political function of Local Government cannot be discarded. It is at the local level that the relationship between elector and elected is closer, which helps to create an awareness among local voters of their ability to influence decisions. For that reason, Local Government is more accessible and therefore more accountable (Byrne, 2000).

Accountability, which in the private sector is secured almost exclusively through customer choice in the market place (Sanderson, 1992), in local authorities embraces the following elements (Skelcher, 1992b):

- the electoral process;
- the accessibility of elected politicians;
- the wide stakeholder base, with a large number of interest groups organised around particular issues and ready to lobby and influence decisions;
- the high level of openness in the decision-making process (including public legal right of access to some files and meetings and an active local media).

The existence of a multiplicity of stakeholders with different views, including individuals acting in different situations as consumers, voters, and taxpayers, adds complexity to the definition of the purpose of Local Government activities (Sanderson, 1992). Local authorities have to consider simultaneously the needs and expectations of individuals and communities and try to find an adequate balance between them when conflict arises.

Because its members have local knowledge and sensitivity, Local Government is seen as an efficient and effective method of administering certain services (Byrne, 2000). In terms of service delivery, it is possible to state that most local authorities in Europe operate in several areas as enabling authorities, working together with a plurality of organisations in the actual provision of services, while retaining some degree of responsibility and control over them.

In spite of the existence of large differences in the way Local Government operates among EU countries, it is possible to identify a number of characteristics that are common in most situations and that distinguish Local Government from other forms of Public Administration (Byrne, 2000):

- it is elected (most local authorities consist of representatives chosen by the members of the community);
- it is multi-purpose (every local authority has many jobs to do and a variety of services to provide);
- its responsibilities are confined to a particular geographical area.

The degree of decentralisation and autonomy enjoyed by Local Government is not the same all over Europe.

In Portugal, like in most Western Continental Europe (Stewart, 1995), there has been a trend to decentralise power from State Government to Local Government (Ruivo, 2000). In this sense, besides signing the European Chart of Local Autonomy in 1990 (Resolution n. 28/90), Portugal has recently introduced new legislation (see next section), which broadens Local Government competencies and increases the proportion of financial resources under its control.

Norton (1991) proposes a distinction between the systems of North America and the UK and those of non-English speaking countries of Western Europe. In our opinion, the system of Local Government in Portugal, characterised next, is closer to the latest group in that it exhibits the following characteristics:

- the position of Local Government institutions as organs of the State, as well as their roles and functions are guaranteed in the national Constitution;
- interdependency and mutual awareness between the levels of Central and Local Government;
- local authorities have a power of general competence, i.e. they are wide-purpose institutions with the right to take any action on behalf of their local community that is not specifically barred to them (Stewart, 1995, p. 251).

1.2.1. The System of Local Government in Portugal

The origins of the Portuguese Local Government date back to the Middle Age. The development of local institutions in primitive communities played an important role in the consolidation of Portugal as an independent State during the twelfth and thirteenth centuries.

Like in many other European countries, the Portuguese Local Government originates from institutions of self-government existent in towns and cities. However, while the expansion of Local Government in most European countries is associated with the development of the Welfare State in the post-war period, when many new responsibilities assumed by the State were placed in the hands of Local Government, in Portugal, that tendency was much attenuated.

In our view, two main reasons explain the difference: first, Portugal was not directly involved in none of the World Wars and, second, was under a fascist regime during five decades. During that period, the centralisation tendency was very strong and the role of Local Government was diminished, with scarce resources and limited chances to exercise its competencies (Ruivo, 2000).

It was only in 1974 that the democratic system was established. The development of an effective system of Local Government was regarded as an important factor for the consolidation of the new democracy in Portugal.

The democratisation process then initiated gave priority to the decentralisation and strengthening of Local Government. With this purpose, the Portuguese Republic Constitution enunciates four main principles (Pereira, 1991):

- Autonomy of local units of administration;
- Existence of Local Government as a part of the democratic organisation of the State;
- Financial and property autonomy;
- Local Government self-regulatory capacity.

The Portuguese Local Government currently comprises 308 municipalities and 4241 parishes (Table 1.2), which are the lowest-level units of the system. According to the Constitution (article 236), administrative regions are also part of the Local Government. Nonetheless, they were not yet implemented and, in 1998, their *creation in concrete* was rejected in referendum. Finally, the Local Government equally includes metropolitan areas and associations of parishes and municipalities.

Source: National Institute of Statistics (1998)

Table 1.2. General statistics about the Portuguese Local Government

In the absence of administrative regions, municipalities are the most important component of Local Government and, therefore, the focus of our research. Parishes are institutionally represented in the organic structure of the respective municipality (in the assembly) and strongly depend upon it, even if this dependence was somehow diminished by the recent Competencies Law (Law n.169/99), which encourages municipalities to delegate to the parishes responsibilities in areas like street cleaning, gardening and maintenance of public property.

Municipalities are highly dissimilar (Bravo and Vasconcellos e Sá, 2000). Some are very small in area and have a high demographic density, whereas others, especially in rural regions, occupy a large area with few inhabitants. Overall, a third of the municipalities have less than 10,000 inhabitants and about a half between 10,000 and 50,000 inhabitants. Also, wealth is geographically concentrated. 51% of the municipalities belong to two regions – North and Metropolitan Area of Lisbon –, which cover over 70% of the Portuguese population and represent a similar proportion of income. 80% of the municipalities own revenues are collected in Lisbon, Porto, Faro, Setúbal and Braga, while just five municipalities – four in the Metropolitan area of Lisbon and one in the Metropolitan are of Porto – represent almost a quarter of the Local Government expenses.

Within each municipality, there is a clear separation between two boards – the municipal council/chamber, which is the executive body, and the municipal assembly, which has deliberative functions, including the approval of the annual plan of activities, budget, annual financial report and major municipal policies. The assembly is also responsible for monitoring the activity of the municipality executive board. In addition, municipal consultative councils may be created in each municipality. The two bodies – executive and deliberative – are elected separately by universal suffrage according to a system of proportional representation, in elections held every four years.

As stated before, the Portuguese Local Government has financial and budgetary autonomy. Yet, it remains somehow dependent from the Central Government from whom it gets most of its resources.

The 1979 Local Finances Law was an important contribution to the aim of decentralising and giving autonomy to Local Government (Ruivo, 2000). It provided Local Government institutions with the ability to establish sources of revenue that could revert to them and defined, for the first time, the percentage of State taxes revenues municipalities and parishes were entitled to. The law was then reviewed in 1987 and, more recently, in 1998, to clarify some rules and to provide the Local Government with additional resources.

According to the Law 42/98, municipalities receive 30.5% of the average product of the public revenues coming from income taxes and the VAT: 24% go to the General Municipal Fund (FGM) and 6.5% are affected to a Municipal Cohesion Fund (FCM). Parishes also have, for the first time, their own fund, receiving 2.5% of the same national taxes[1].

In short, the General Municipal Fund is distributed among the municipalities according to a set of criteria (such as population, area, number of parishes and amount of single income tax collected), whereas the Municipal Cohesion Fund aims to correct regional asymmetries, and thus is allocated in a way that benefits the municipalities with the lowest development indices.

[1] In 2001, the Law was revised and a new fund created. Currently, the distribution is as follows: General Municipal Fund 20.5%, Cohesion Municipal Fund 5.5%, Municipal Basic Fund 4.5% and Parishes Fund 2.5% (Law n. 94/2001).

The new rules represent an important increase in the municipalities' financial resources and ensure that the amount of the transfers from Central Government will rise at a rate equal or superior to the annual inflation.

Grants and transfers represent by far the most important share of the Local Government revenues. Municipal taxes, fees required to obtain certain licences (such as for urbanisation, building works, occupation of public areas, etc) and payments for the services provided (water distribution and treatment, waste collection and disposal, public transportation, etc) are on the increase, but are, in general, still insufficient to cover most of the municipalities' expenses, around 40% of which correspond to investments in infrastructures (such as roads, sewage, and buildings), followed by costs with personnel (Bravo and Vasconcellos e Sá, 2000; Ruivo, 2000).

Financial issues cannot be dissociated from the responsibilities assigned to the Local Government.

Legislation published in 1999 clearly increases the competencies and responsibilities of municipalities, especially in fields such as education, health and social assistance, which were until then almost completely outside municipal jurisdiction.

In fact, according to the Law n. 169/99, municipalities have a range of competencies wider than before in areas like housing, culture, environment and police. For example, in the education and cultural fields, they are supposed to participate in educational projects, organise school transportation, give financial support to institutions that promote sport and culture, incentive tourism, and protect the historical heritage. The transference of these competencies was not yet a reality in many instances (Bravo and Vasconcellos e Sá, 2000), but is already visible in areas such as pre-school education.

Portuguese municipalities generally provide services directly by employing their own staff and resources, although, in specific areas, they act as contracting-out or enabling authorities as well.

In any case, it must be said that the relative weight of Local Government in the Administrative Public Sector is still low if compared to the majority of the EU countries (Bravo and Vasconcellos e Sá, 2000). According to recent numbers, local expenditures correspond to less than 6% of the Gross Domestic Product, against a EU average of almost

10%. However, as Bravo and Vasconcellos e Sá (2000) note, international comparisons are always difficult to establish due to differences in the level of competencies, local taxes and existence (or not) of administrative regions.

The Portuguese Local Administration employs 116,000 people, i.e. about 17% of the total number of public servants (Araújo, 2002). From those, 83,132 work for the municipalities, with an average age of 42 years old (Correia, 1999). Moreover, the overall education level is low, especially if compared with that of Central Government. Blue-collar categories are dominant (Ruivo, 2000); just 6% of the employees has a degree and almost a half has completed only four schooling years (Correia, 1999). The lack of administrative and managerial training is widely acknowledged and specific programmes have been introduced in order to meet these needs (Araújo, 2002). The remuneration gap between Central and Local Administration is also significant (Correia, 1999).

There are, therefore, important deficiencies and shortcomings in the internal organisation and staffing of Local Government institutions, especially in view of the new responsibilities and competencies assigned to them.

Without any doubt, the recent scenario raises new problems and expectations for the Local Government. In order to find appropriate answers to them, Portuguese municipalities will have, in our view, to invest on education and training, establish new partnerships and embrace new forms of management.

1.2.2. Challenges and Strategies

Local Government currently faces many challenges, most of which related to the general trends observed in the Public Sector (see section 1.1).

Issues of Local Government spending have dominated much of the political agenda. However, pressures for change go much further. They are linked to the crisis that affects traditional bureaucracies, commonly regarded as inflexible and remote from the public (Stoker, 1991). Given their role in the political system, the detachment of conventional Local Government structures from the citizens they represent is a major concern. Making Local Government more open, responsive and effective is therefore a great test for the modern democratic States.

When addressing the challenges, two main strategies emerge (Stoker, 1991): that of essentially reforming the established systems of public service delivery (as it has been the case in Sweden and Norway) and that of mainly introducing market mechanisms and a business-like configuration (typically the case in Britain and, at some extent, in the Netherlands).

At some degree, the role of local authorities has, in any case, been shifted from the direct provision of services to more enabling functions, through managing contracts and partnerships with public, private and voluntary organisations (Kirkpatrick and Lucio, 1995b; Paddon, 1992). Favourable arguments stress that contracting clarifies responsibilities and roles, leads to stronger financial and managerial control and increases market orientation, thus ultimately resulting in lower costs and greater innovation (Flynn, 1997). On the other hand, critics argue that "commercial criteria tend to force contracting into secure a narrow form of efficiency, one dominated by cost savings to the detriment of quality service delivery" (Rouse, 1999, p. 85) and emphasise that contracts deteriorate public accountability, therefore generating a 'democratic deficit' (Rouse, 1999).

The move from direct service providers to enabling authorities – at the extreme what Stewart (1993, quoted in Rouse 1999) calls "government by contract" – means that emphasis must be placed on the new Local Government roles of supervision and monitoring.

According to Skelcher (1992a), as enabling organisations, the new tasks of local authorities essentially are:

- to specify the service required, based on political, professional and customer priorities and financial capacities;
- to let the contract;
- to monitor the contractor's performance against precise specifications and other contract conditions;
- to take proper action when necessary to ensure contract compliance.

Paddon (1992) argues that, providing contracts are properly managed, enabling authorities do not lose their strategic role. On the contrary, Local Government can act then more as leader, planner and regulator with a wider freedom to intervene on issues of general

interest to their communities. However, if this is to happen, the values of equity, citizenship, community and democracy have somehow to be incorporated in the contract.

Furthermore, public services fragmentation presents another challenge – to co-ordinate a large number of units and arrangements so that the overall governmental goals are achieved.

With the enlargement of Local Government responsibilities, and as a means to expand technical and financial capabilities, local authorities have been persuaded to seek new forms of association.

In Portugal, the existing national association of municipalities (ANMP), with its head office in Coimbra, was set up on May 1984 and is a demanding body that is formally consulted in most governmental decisions affecting the Local Government.

In addition, in the large urban centres, particularly in the areas of Lisbon and Porto, efforts have been made to encourage the municipalities to create institutional arrangements for the provision of supra-municipal services (urban transport, water supply, sewage treatment, environment protection, etc.). The Metropolitan areas of Lisbon and Porto were established in 1991 and formally institutionalised in 1999. New metropolitan areas are expected to be created in the near future.

Acknowledging that sometimes external partners are more responsive, offer cheaper solutions to service provision, and have information and skills not available to the local authority (Skelcher, 1992a), the Law n. 169/99 goes beyond the current agreements and indicates several areas where partnerships between the municipality, citizens, private and voluntary organisations should be promoted, as well as the rules to put in place those agreements.

In Portugal, the municipalities' enabling role is not by any means comparable to that observed, for example, in the UK, but it became apparent in areas such as public transportation, water supply and refuse collection and disposal. As mentioned before, with the reinforcement of this tendency, Portuguese municipalities need to learn how to "manage by contact" without loosing their strategic role or jeopardising service quality. This inevitably calls for new skills in market management, specification, competitive process, negotiation, regulation and monitoring (Smyth, 1997).

Changes also demand increasing collaboration among municipalities. Regarded as essential to facilitate learning, the co-operation among Local Government organisations, especially within the EU, has been reinforced by such structures as the Council of Europe and the International Union of Local Authorities (Stoker, 1991).

Following a general move towards Quality, the Portuguese government launched several initiatives. Among them, the Resolution n. 11522/97 establishes an award to promote service quality and distinguish the best municipal projects of modernisation. Another stimulus is given by the recent legislation on Administrative Modernisation (Law-Decree n. 135/99), which improves simplicity, accessibility, and transparency.

Additionally, the Portuguese government, both at the central and local level, has assumed the introduction of new technologies and information systems as a top priority. Indeed, relevant research demonstrates that information technologies (ITs) have impact on service quality and organisational performance, especially in the Local Government context (Nielsen and Hølt, 2000). IT is sometimes regarded as an enabling tool for cost cutting (Korac-Kakabadse and Korac-Kakabadse, 1998), but its effects potentially go well beyond. IT facilitates information sharing and the replacement of hierarchical, largely paper-based bureaucracies with more flexible structures based on inter-departmental co-ordination and "networking" (Martin, 1997). Moreover, new technologies can also be used to enhance local democracy and to more actively involve the local community, promoting greater interaction between councils and the citizens they represent. Overall, "the role of IT has evolved from that of an administrative support tool to that of a major catalyst for change" (Korac-Kakabadse and Korac-Kakabadse, 1998, p. 98).

It can be argued that Local Government in Portugal remains essentially operating under the 'old' Public Administration paradigm. Careers and other crucial people management issues are highly centralised and there is a lack of incentives to encourage and reward good performance. Araújo (2001) supports this position, arguing that the local authorities' organisation, power and mission are enacted by legal statute and considering that public services are in most cases provided through uniform structures. Accordingly, the focus is on administrative control of inputs and activities are strictly organised to follow legal requirements, leaving local government officials little freedom to manage.

However, in view of recent transformations, some of which have just been described, we believe that this panorama is starting to change, with municipalities being increasingly aware of the necessity of introducing new management practices that will make them more accountable and able to better accomplish their economical and political roles.

1.3. RESEARCH PURPOSE, OBJECTIVES AND RELEVANCE

Following the publication of Peters' and Waterman's book *In Search of Excellence* in 1982 and the introduction, in different countries and industries, of various Quality Award programmes – the most widely well-known being the Deming Prize, the Malcolm Baldrige National Quality Award, and the European Quality Award –, Organisational Excellence (OE) became a popular expression. Yet, the way it is understood raises important problems and needs to be further discussed. To find an appropriate definition of the concept is the first step for being able to properly measure it.

There is, in any case, a consensus in the literature that Organisational Excellence is somehow associated with the implementation of a set of TQM practices. Every business excellence model is based on this assumption. However, the relationship between TQM and Organisational Excellence needs to be analysed in some detail and the contribution of different TQM dimensions to an aggregate measure of Excellence investigated.

This research aims to study the drivers of Organisational Excellence in the Public Sector. Discussions around the applicability of TQM to public organisations and *ad hoc* examples of its implementation proliferate in the literature. However, virtually no holistic Quality Management models were developed within the public services context. Furthermore, the number of empirical studies aimed at testing the implementation and relevance of quality principles in public institutions is limited. In this regard, research specifically focused on the Local Government is even more restricted and in the case of the Portuguese Local Government non-existent.

Organisational Excellence inevitably calls for the simultaneous (and balanced) satisfaction of the organisation's stakeholders. The existing business excellence models consistently draw attention to this fact and, in special, to the need of collecting measures of customer and employee satisfaction. However, they often exclude important stakeholders, such as

the Government, financial institutions, or the local community (some of which are particularly relevant to Local Government organisations). Moreover, current frameworks only collect stakeholders' feedback on a very limited number of issues (usually strictly related to product and service characteristics), excluding their assessment of the organisation as a whole. Therefore, external stakeholders' input is insufficiently used for measuring organisational performance.

The main purpose of this research is to develop a new system to measure Organisational Excellence in the Local Government that is, as much as possible, multidimensional, comprehensive, integrated and reliable.

Such system must be based on the Critical Success Factors (CSFs), which, according to Leidecker and Bruno, 1984, are the limited number of areas in which results, if satisfactory, will ensure successful performance for the organisation. Therefore our first research objective is to identify the CSFs for the development of public sector organisational excellence.

Then, an appropriate model, incorporating the key performance drivers, has to be selected, and possibly modified to fit the Local Government context.

Furthermore, the relevant stakeholders of a municipality must be identified and adequate frameworks developed to gather their feedback on the various performance dimensions.

A central objective of this research is to empirically test and validate the proposed frameworks. Once validated, they are used to measure Organisational Excellence in the Portuguese municipalities.

The final expected outcome of our study is a performance measurement system that integrates the assessments of internal and external stakeholders.

In synthesis this research aims to address the following questions:

- *Which are the CSFs for the development of Organisational Excellence in the Public Sector?*
- *How do those CSFs relate to each other and what is their relative impact on Organisational Excellence?*

- *Who are the main stakeholders of the Local Government and how can their feedback be incorporated in the measurement of Organisational Excellence?*
- *How can the perspectives of different stakeholders be integrated to form a performance measurement system that supports and drives Organisational Excellence?*
- *What is the performance profile of the Portuguese municipalities? Where do their strengths and weaknesses lie? How can they improve?*

The research is focused on the Portuguese Local Government where there is a lack of empirical studies on Quality Management, in general, and no previous research was conducted on analysing the contribution of the various TQM elements to OE. It is also the first time that an aggregate measure of performance excellence is calculated, based on data collected from different stakeholders, making this research relevant and original.

Municipalities will thus be provided with a system to regularly and systematically measure performance on key areas, so that major problems and improvement opportunities can be promptly identified, comparisons made and progress monitored.

By its diversity and complexity, the case of the Local Government in Portugal is thought to provide useful insights into some problems associated with the measurement of Organisational Excellence in other countries and parts of the Public Sector.

1.4. RESEARCH DESIGN AND METHODOLOGY

The term 'research' implies a systematic study of the phenomenon under consideration. According to Burns (2000, p. 3), "research is a systematic investigation to find answers to a problem".

In many cases, such answers are not unique, complete, unproblematic or possible to implement in the immediate. However, to undertake the various tasks required to carry out the research and to ensure the credibility of the findings, it is necessary to establish an appropriate plan.

Table 1.3 gives a brief outline of the research design chosen to address the questions discussed in the previous section, and, ultimately, to achieve the research purpose.

Research Design
1. Exploratory stage a. Literature review on total quality management and performance management b. Survey on TQM in the Portuguese Local Government 2. Model Building stage a. Evaluation of the existing Business Excellence Models b. Selection of an adequate model as a basis for the development of the New System to measure Organisational Excellence in the Local Government c. Enrichment of the model with the CSFs identified and redefinition of some TQM concepts in a way that fits the Public Sector setting 3. Model Testing and Validation stage a. Development of adequate frameworks to gather the assessments from the various Local Government stakeholders b. Development of the measurement instruments (questionnaires) for assessing Organisational Excellence in the Portuguese municipalities c. Test the models using data collected from political leaders, managers, local government officials and citizens 4. Model Application Stage a. Estimation of the various parameters and calculation of the excellence scores for the various critical success factors b. Computation of the Organisational Excellence indexes c. Evaluation of improvement strategies (according to a sensitivity analysis) 5. Present the New Performance Measurement System a. Integration of internal and external stakeholders' perspectives and measurements b. Determination of the Final Performance Excellence Index c. Final recommendations

Table 1.3. General outline of the research design

Reviewing the literature on TQM and performance measurement in the Public Sector, with a special reference to the Local Government, is the obvious starting point to get an overview of the main issues associated with the research problem, identify main contributions and gaps of previous studies and analyse the limitations of existing frameworks.

An exploratory survey on TQM in the Portuguese municipalities is also conducted to understand how quality management approaches are being implemented and to identify the key determinants of success in a municipality.

The second stage is to develop/select the model to measure Organisational Excellence in the Local Government. At this point, existent Business Excellence models and other frameworks are critically reviewed, according to the modelling requirements and purposes of this research. Appropriate models should have a sound theoretical foundation, be comprehensive and holistic, while measurement needs, associated with our research questions, imply the use of an analytical and mathematical model.

The model thus selected is then enriched through the inclusion of the CSFs identified and its constructs redefined to better reflect the Public Sector context.

Since performance excellence is to be measured according to the views of different stakeholders, suitable frameworks are developed and questionnaires designed to collect feedback from political leaders, managers, local government officials and citizens. All the frameworks are empirically tested and the quality of the measurement scales inspected.

In the model application stage, with the support of K&W software (see brief description in Appendix E), data collected through the administration of the excellence questionnaires is used to estimate the various parameters of the model and to determine the scores associated with each critical success factor. The organisational excellence indexes are calculated and, based on a sensitivity analysis, improvement strategies discussed.

Internal and external measurements, which are obtained separately, need afterwards to be integrated to provide an aggregate and complete view of the municipalities' performance. By combining internal and external frameworks, the new performance measurement system is presented and the final Performance Excellence Index calculated.

Looking at the strategy described above, it may be concluded that our research essentially follows a deductive approach[2], since a theory is developed prior to data collection. However, at certain extent, inductive processes are also applied, given that data collected

[2] As Hussey and Hussey (1997, p. 13) note, there are two main approaches to conducting research: induction and deduction. "Deductive research is a study in which a conceptual and structural structure is developed and then tested by empirical observation (...). Inductive research is a study in which theory is developed from the observation of empirical reality (...)".

in the exploratory survey plays an important role in reformulating the Organisational Excellence model. As typically occurs in the deductive approach (Saunders, Lewis and Thornill, 2000), there is an attempt to explain causal relationships between variables, analysing which management practices affect Organisational Excellence and at what extent.

This research adopts a systemic perspective (Jackson, 1991). Following Deming's (1986) definition, municipalities are regarded as "network(s) of interdependent components that work together to try to accomplish the aim of the system". Consequently, the models used to represent them must be holistic, emphasising the interrelationships between different elements and the need for alignment and consistency.

In this regard, the structural equation modelling methodology, as explained later, is appealing in that it permits to simultaneously analyse the pattern of interdependent relationships.

1.5. OUTLINE OF THE THESIS

This first chapter presented the overall context within which our research problem is placed. The main issues that currently dominate Public Sector and Local Government management were summarised. The Portuguese system of Local Government, which constitutes the focus of this research, was briefly described and some examples given on how Public Administration in Portugal is addressing the key challenges raised by the crisis of the old bureaucratic paradigm and the emergence of a new (and somehow vague) public sector management philosophy.

The following chapters will analyse the main drivers of Organisational Excellence in the Local Government and how they can be integrated in a new Performance Measurement System. According to the research plan (see Table 1.3), the thesis is structured as follows:

- **Chapter 2** introduces the key concepts of Organisational Excellence and Total Quality Management. The (non)existence of a Total Quality Management (TQM) theory and its positioning in relation to other main organisational paradigms is discussed. The TQM role in supporting Organisational Excellence (OE) is analysed. According to conceptual and measurement modelling requirements, the existing Business Excellence

models are critically reviewed and an appropriate framework selected to constitute the basis upon which the Excellence of the Portuguese municipalities will be analysed and measured.

- **Chapter 3** discusses the applicability of TQM approaches to the Local Government, examining how its core concepts and practices can be interpreted and implemented. Particular attention is given to the meaning of Quality in the Local Government and to the characterisation of its customers, consumers and citizens. The importance of the political dimension and the constraints associated with the prevalent bureaucratic culture are also considered. The main motivations and barriers for introducing TQM are identified and the lack of models developed and empirically tested in the Local Government setting evidenced.

- **Chapter 4** essentially presents the findings of the exploratory study conducted in the Portuguese municipalities to assess why, how and at what extent TQM is being implemented, and identify the main problems experienced. The critical success factors to be incorporated in the OE model are validated and a first attempt made to link TQM implementation to superior performance.

- **Chapter 5** discusses the building blocks of a theory and the problems associated with their measurement. Issues of validity and reliability are carefully analysed and a methodology – the structural equation modelling (SEM) approach – presented. It is argued that it allows theories to be formulated and tested, and the quality of the measurement scales to be investigated, taking maximum advantage of the interplay between theory and data. The data collection methods employed in this research, fundamentally based on the use of self-administered questionnaires, are also examined.

- **Chapter 6** presents the model chosen to measure OE in the Local Government and reports the key results from its application to the Portuguese municipalities. The measurement instrument (questionnaire) used to collect data from political leaders, managers and local government officers – i.e., the internal stakeholders – is described and the sample characterised. The process of model validation and testing is explained in some detail. The model estimates and the scores obtained in each critical success factor are presented and the main findings discussed. Based on the model results, some improvement strategies are suggested.

- **Chapter 7** concentrates on the prime of the OE model – Leadership – commonly regarded as the most critical aspect for TQM implementation. The roles and requirements of effective Leadership are discussed in light of the Local Government particularities. Based on those requirements, a structural model for measuring Leadership Excellence is developed and tested in the Portuguese municipalities. According to the scores obtained in each dimension, major strengths and weaknesses of municipal leaders are identified. Leaders' and employees' views are also confronted and major perception gaps detected.

- **Chapter 8** presents a framework – the business scorecard –, which includes the same critical success factors as the model described in Chapter 6, but that focuses on the (few) dimensions most relevant from an external stakeholders' perspective. In particular, the importance of incorporating citizens' views on the measurement of OE is stressed and the scorecard used to capture their feedback. The associated questionnaire is presented and the citizens' sample described. The main results of its application are reported and some recommendations made on how municipalities can improve on their citizens' eyes.

- **Chapter 9** introduces a New Performance Measurement System, which integrates internal and external stakeholders assessments to get an overall picture of OE. Citizens, managers and employees measurements are combined to calculate the final Performance Excellence Index for the Portuguese municipalities. Major (potential) divergences between external and internal evaluations are investigated. It is argued that the system overcomes some limitations of the existing frameworks used to measure performance in the Local Government, drawing attention to the main drivers of OE.

- **Chapter 10** summarises the key research findings, discusses the main contributions and limitations of the study and suggests paths for future investigations.

CHAPTER 2 - TOTAL QUALITY MANAGEMENT AND ORGANISATIONAL EXCELLENCE:

Concepts, frameworks and modelling requirements

Despite the profuse literature on Total Quality Management (TQM) and Business Excellence (BE), most of what has been written comes from anecdotal evidence and individual reports of successful stories. It is widely recognised that there is a lack of a theoretical basis on which empirical studies can be grounded.

A model of TQM capable of effectively promoting Organisational Excellence (OE) must be based on the critical success factors (CSFs) and comprise a measurement approach able to evaluate the real contribution of each dimension to OE, suggest improvement strategies and track progress over time.

Following a summary of the evolution of the Quality concept, section 2.1 briefly analyses how TQM fits into some well-known management paradigms and organisational models. Since our research is focused on the Local Government, which is responsible for providing a wide range of services, service quality frameworks are analysed in section 2.2. The perspective adopted in this research concerning the concepts of TQM and BE (and how they relate to each other) is discussed in section 2.3, followed by an examination of existent frameworks and models aimed at guiding the implementation of TQM and measuring the levels of quality and performance achieved. Hence, our focus is on models that address the organisation as a whole with the purpose of assessing how it is performing on the key business areas. Therefore, in Section 2.4, quality award-based models, which evaluate the organisation according to a broad set of criteria, are critically reviewed. Finally, based on the requirements of a conceptual and measurement model, the choice of Kanji's Business Excellence Model (KBEM) as the basis to analyse the Excellence of the Portuguese municipalities is justified.

2. 1. TOTAL QUALITY MANAGEMENT (TQM) AND MANAGEMENT THEORY

Since the 1930s, quality management has raised considerable interest among researchers and practitioners.

Yet, there is no absolute and ultimate definition of Quality. It is a multi-dimensional concept and each author tends to emphasise a different dimension.

Feigenbaum (1983) stresses the need to think about Quality in relative terms, associating quality to value. He points out that products and services have multiple attributes and therefore purchase decisions are usually made taken into account the balance between characteristics such as price and durability, for example.

Crosby (1979) defines Quality primarily as conformance to requirements (allowing for comparisons to be made, both across companies and over time, with reference to objective and standard measures), while Juran (1988) regards Quality essentially as fitness for use, which he defines as "the extent to which a product successfully serves the purposes of the user".

Deming, on his turn, has never defined Quality. All he said was that Quality is "all about improvement and innovation" (Wright, 1997).

In the service literature, Quality often means meeting or exceeding customers' expectations (Parasuraman, Zeithaml and Berry, 1985). This perspective emphasises the need to evaluate quality from the customer perspective and to understand the drivers of customer satisfaction.

Summarising the views of these quality gurus, Garvin (1987) argues that Quality can be seen from five distinct (but complementary) perspectives, as shown in Figure 2.1.

Figure 2.1. Quality from different perspectives

(Adapted from Garvin, 1984, in Gunesakaran *et al.*, 1998)

From his systematisation efforts, Garvin (1987) segmented Quality into eight dimensions:

- Performance (operating characteristics of the product);
- Features (secondary characteristics that supplement the basic functioning of a product);
- Reliability (probability of a product malfunctioning or failing within a specified time period);
- Conformance (degree to which a product's design and operating characteristics meet established standards);
- Durability;
- Serviceability (speed, courtesy, competence, accessibility, and ease of repair);
- Aesthetics;
- Perceived quality (related to the reputation of the producer).

The international definition of Quality, as proposed by the ISO 8402 standard, states that Quality is the "totality of the characteristics of an entity that bears on its ability to satisfy stated and implied needs" (Dale *et al.*, 1997, p. 2).

It is possible to argue that each Quality definition reflects the economical and social context in which it emerged. Broadly, the evolution of the meaning of Quality fundamentally reveals the shift from mass-production to customisation and from a producer- to a customer-oriented culture.

Accordingly, Quality moved from an error cause removal to an error prevention culture and from a reactive to a proactive philosophy, within which improvement and innovation become part of everyday work (Cameron and Barnett, 2000).

According to Cole (1998), this 'new quality paradigm' is fundamentally characterised by an outwards orientation to customers in contrast with the strong inward orientation of the 'old approach'. Garvin (1987) associates the 'new approach' with the appearance of strategic quality management.

From a taxonomy standpoint, TQM emerged in the 1980s, but its roots go back to the scientific management principles of the 1920s (McAdam, 2000). Since then, however, TQM evolved from a predominantly narrow and mechanistic approach (McAdam, 2000), with quality being essentially regarded as a technical and production matter, to a more subjective and social approach, which considers Total Quality as a comprehensive management philosophy, embracing all the aspects of the organisation and involving its entire workforce, as well as its customers and suppliers (Dale *et al.*, 1997; Mehra *et al.* 2001).

As illustrated next, there are several definitions of TQM available in the literature, which, in a way or another, emphasise its organisation-wide nature:

> *"Total Quality Management is an approach to improving the effectiveness and flexibility of a business as a whole. It is essentially a way of organizing and improving the whole organization; every department, every activity, every single person at every level"* (Oakland, 1999).

> *"Total Quality Management is a management philosophy that fosters an organisational culture committed to customer satisfaction through continuous improvement"* (Kanji, 2002).

The "official" definition of TQM is given by the ISO, as:

> *"A management approach of an organisation, centred on quality, based on the participation of all its members and aiming at the long term success through customer satisfaction, and benefits to the members of the organization and to society"* (BS EN ISO 8402, 1995, quoted in Dale *et al.*, 1997, p. 24).

This small set of TQM definitions clearly shows that, though some similarities exist, different researchers tend to emphasise distinct aspects of the concept. Moreover, in some cases, there are even confusing references to TQM as a philosophy, theory, implementation framework, or simply as a set of tools and techniques (Dewhurst *et al.*, 1999; Hackman and Wageman, 1995; McAdam, 2000; Moreno-Luzón and Peris, 1998).

Each approach to Quality generates different assumptions and distinct criteria for measuring it. Consequently, "quality is a diffuse, multidimensional, construct, and little consensus exist regarding how it can be measured or operationalised" (Cameron and Barnett, 2000).

Therefore, one of the main difficulties of dealing with TQM from a research point of view is the lack of a coherent, sound and well-established theory (Cameron and Barnett, 2000; Dean and Bowen, 1994; Forza and Filippini, 1998; Hackman and Wageman, 1995).

Most research on TQM is, at some extent, based to the works of quality-gurus, such as Juran, Crosby and Deming (see Table 2.1). In spite of some important differences, they all highlight three major principles: customer focus, continuous improvement and teamwork (Dean and Bowen, 1994).

However, their contributions (though extremely important for the diffusion of quality management) are more lists of prescriptions than 'true' concepts that can be integrated to form a theory.

In this context, it is useful to examine how TQM relates to three well-known organisational models: mechanistic, organismic and cultural (see Table 2.2).

Table 2.1. The contributions of the quality gurus in brief

(Based on Cole, 1998; Dale *et al.*, 1997; Deming, 1986; Petersen, 1999)

Table 2.2. TQM and organisational models

(Adapted from Spencer, 1994)

According to Spencer (1994), TQM does not constitute by itself a completely new paradigm, rather captures characteristics from distinct organisational models and amplifies them by providing a methodology for use.

Both the mechanistic model and TQM conceive organisations as goal-attainment devices (Spencer, 1994), but TQM recognises the environment as a vital source of resources and constraints.

Treating organisations as *organisms* is associated with the systems perspective (Jackson, 1991). The impact of the organismic model can be found on the tendency of TQM to see organisations as systems, which in order to operate effectively need to have a purpose. Accordingly, organisations are made of highly interdependent parts that must work together to achieve the system's overall aim. This holistic view, opposed to the reductionism associated with the mechanical approach, is strongly emphasised in Deming's works. Also in line with this perspective, Lakhe and Mohanty (1995) regard organisations as "social-technological system(s), where the activities carried out are geared towards the customer requirements with efficiency and effectiveness in mind".

The system-structural view of TQM (Benson *et al.*, 1991) states that quality management can be described as a three-stage process model in which: first, the organisational context is assessed; then, the organisational needs to change are analysed; and, finally, the organisational response is implemented so that the possibilities of survival are capitalized and effectiveness enhanced. Benson's *et al.* (1991) findings suggest that knowledge of the organisational context is useful for explaining and predicting quality management practice. Therefore, the contingency approach to TQM, which states that, to be successfully implemented, TQM must be properly aligned with the particular organisational environment, strategies and design (Behara and Gundersen, 2001; Gunesakaran *et al.*, 1998; Moreno-Luzón and Peris, 1998), has also its roots on the organismic model developed in the 1950s.

Moreover, the holistic view of TQM is an important consequence of adopting a systems perspective. It calls attention to the importance of implementing TQM on an organisation-wide basis and to the need of establishing coordination mechanisms. By seeking solutions to the organisation as a whole, the holistic approach goes beyond the local/departmental optimisation resultant from the mechanistic model.

With reference to the cultural model, which regards organisations as arenas where different perceptions of reality are continuously negotiated and renegotiated (Jackson, 1991), TQM mainly inherits the conception of culture as a modern form of control and the importance of developing shared values and beliefs. However, while the cultural model tends to see conflict among organisational actors as innate, TQM envisages a convergence of the long-term interests of all stakeholders.

TQM combines characteristics of two broad schools that dominated the management theory in the twentieth century – the 'rationalist' school, associated with the principles of scientific management and the theory of bureaucracy, and the 'human relations' school, which emphasises the role of the organisation as a social system, driven by psychological and social needs (Grant *et al.*, 1994). According to Grant *et al.* (1994), quality management bridges these two schools by incorporating the theories of the rationalist school in its 'hard' aspects (such as work design and statistical process control) and by integrating the behavioural principles of the human relations approach in its 'soft' aspects (like leadership, empowerment and training).

2.2. SERVICE QUALITY - DISTINCTIVENESS AND MEASUREMENT MODELS

Local Government institutions essentially provide services and therefore any model for managing quality in their context must address the problems associated with service quality.

Services have characteristics that differentiate them from products and that have an impact on the way quality is managed. These include the following aspects (Behara and Gundersen, 2001; Franceschini *et al.*, 1998; Soteriou and Chase, 1998; Sureshchandar *et al.*, 2001):

- High degree of customer interaction and participation in the production process;
- Inseparability of production, delivery and consumption;
- Perishability; and
- Intangibility.

These characteristics represent additional problems for service firms in terms of managing and controlling the factors which affect quality, and consequently increase the degree of

uncertainty they face in the production and delivery process. Customers' involvement means that consistency and uniformity are particularly difficult to be sustainable achieved. The intangibility of services, makes it hard to set standards and to measure them. Given the lack of tangible attributes, consumers tend to look for signs of quality, such as physical tangibles, reputation and communication. As a result, frontline staff and physical facilities assume a key importance in customer judgements.

As Sanderson (1992, pp. 17-18) points out, local authority services are diverse in terms of nature and "conditions of production". Some are essentially technical services (e.g. refuse collection); others are strongly "people-oriented" (e.g. social services or housing). TQM implementation is more difficult in the later ones, where standards are not easy to establish, uniformity is not always beneficial, and customer involvement in service provision larger.

Based on the distinction between mass services, service shops and professional services, Silvestro (2001) argues that the transference of TQM principles and practices originated in the manufacturing service is more complex for professional services, which are highly customised, front-office based and greatly dependent upon customer-staff interaction. Results of his research, suggest that TQM implementation may in fact vary on the basis of service type. Briefly, it was found that implementation of customer orientation, continuous improvement and empowerment was more mature in professional services and service shops than in mass services; on the other hand, quality measurement was more established in service shops and mass services. In the Local Government, given the diversity of services provided, we are likely to find a good representation of various service types.

One of the most important debates on the services field refers to the conceptualisation and measurement of service quality.

Most service quality models compare customer expectations and perceptions. According to Zeithaml *et al.* (1988), the global excellence of a service is associated to high-perceived quality, which, on its turn, is influenced by both perceptions and expectations. The same view is shared by Ghobadian *et al.* (1994) who argue that perceived quality depends on prior customer expectations (the a priori image of what will be received) and on actual quality (the actual level of service provided). If perceptions meet or exceed expectations, customers perceive quality positively (Robledo, 2001) and are likely to be satisfied and repeat purchases (Caruana and Pitt, 1997).

In their original formulation, Parasuraman *et al.* (1985) identified ten determinants of service quality: (1) reliability; (2) responsiveness; (3) credibility; (4) competence; (5) access; (6) courtesy; (7) security; (8) communication; (9) tangibles; and (10) understanding the customer. These dimensions were in subsequent works (Parasuraman *et al.*, 1988) grouped into five categories:

- reliability;
- assurance;
- tangibles;
- empathy; and
- responsiveness.

Parasuraman's *et al.* (1985) model attempts to explain how service organisations can influence the perception of quality and identifies five possible gaps:

- customer expectation-management perception gap (lack of customer focus);
- service quality specification gap;
- service delivery gap;
- external communication gap; and
- expected service-perceived service gap (that depends on the dimension of the remaining gaps).

The authors have subsequently developed an instrument – SERVQUAL - to measure these gaps. The SERVQUAL questionnaire is divided into three sections (Parasuraman *et al.*, 1991). Besides including questions to evaluate expectations and perceptions, it requests the customer to indicate the importance of each service quality dimension. Service quality evaluation is obtained by comparing expectation and perception values.

In spite of SERVQUAL popularity, the instrument has several limitations. Bennington and Cummane, (1998) summarise the most important criticisms, as highlighted by several researchers:

- it confuses outcome, process, and expectation;
- it suffers from multicollinearity, as indicated by the strong inter-correlations between the dimensions;
- it is not generic and needs to be customised to the service in question;
- it neglects the price factor;

- due to psychometric problems, the five dimensions may in fact not represent five different constructs.

Buttle (1996) also questions the disconfirmation paradigm upon which SERVQUAL is based - arguing that service quality would be better conceptualised as an attitude – and raises concerns about the universality of the five dimensions proposed. The author further has some reservations concerning the questionnaire administration and the way the scales are presented.

Several other methodologies for service quality evaluation exist. Franceschini *et al.* (1998) compare SERVQUAL with SERVPERF (proposed by Cronin and Taylor and focused exclusively on customers' perceptions), Normed Quality (developed by Teas to explore the meaning of expectations) and QUALIMETRO (conceived for the evaluation and "on-line" service control). They conclude that the SERVQUAL questionnaire is usually longer and more time-consuming but, on the other hand, has the clear advantage of incorporating the weights assigned to each service dimension. A different comparison study was conducted by Robledo (2001) which, based on reliability and validity tests, concludes that models that measure service quality considering expectations are superior to models that measure it as a function of performance only.

There are also service quality frameworks that do not explicitly incorporate perceptions and/or expectations as key autonomous constructs.

Grönroos (1984) identifies two main dimensions of service quality: 'technical quality' (what is delivered) and 'functional quality' (how it is delivered). In any case, it is stressed that these are interdependent dimensions.

More recently, Lakhe and Mohanty (1995) propose a model for measuring total service quality based on five variables:

- Top management commitment response;
- Product and process improvement;
- Human resource excellence;
- Customer orientation; and
- Economic advantage.

However, Lakhe and Mohanty (1995) do not explain how these variables can be operationalised or how they relate to each other.

Therefore, in spite of the proliferation of frameworks developed to measure quality management in the services context, the large majority of them only focus on a limited number of dimensions and there is practically no model that treats collectively all facets of TQM in service organisations.

One exception is the model proposed by Sureshchandar *et al.* (2001). Based on an extensive literature review, the authors propose twelve dimensions for TQM in services:

- top management commitment and visionary leadership;
- human resource management;
- technical system;
- information and analysis;
- benchmarking;
- continuous improvement;
- customer focus;
- employee satisfaction;
- union intervention;
- social responsibility;
- servicescapes; and
- service culture.

The model regards top management commitment and visionary leadership as the impetus for cultural change and TQM implementation, whereas employee satisfaction and customer focus are depicted as the outputs. In our opinion, considering customer focus as an output raises some objections.

In order to empirically validate these constructs, Sureshchandar *et al.* (2001) developed a survey consisting of 126 items (measured in 7-point Likert scale) and collected data from middle and top executives belonging to different banks in India. The final sample included 248 correctly completed questionnaires. Data was analysed using confirmatory factor analysis. Validity and reliability tests were performed to assess the quality of the scales developed. Nevertheless, in terms of calculating the indices for each construct the authors did not go beyond the calculation of simple average scores between respondents' answers.

Furthermore, causal relationships were not even described and only correlations among the constructs were determined.

2.3. ORGANISATIONAL EXCELLENCE AND TQM

It was with Peters and Waterman's (1982) book "*In search of excellence*" that the term 'Excellence' came definitely into use in the management context, being associated with outstanding levels of performance. Focusing on the attributes of performance excellence, Peters and Waterman described 42 of the best-run companies in the USA and tried to provide some general principles that could be applied to any organisation. The eight factors, which they believe contribute to organisational excellence, are:

- Bias for action – solve problems when and where they arise;
- Close to customers – listen to and learn from customers, using their feedback to improve quality;
- Autonomy and entrepreneurship – empower employees to make decisions and try new ideas;
- Productivity through people – invest in people through education and training and foster staff commitment;
- Hands-on, value driven – personal involvement of managers particularly in communicating the organisation's core values;
- Stick to the knitting – concentrate on the core business activities;
- Simple form, lean staff – keep a simple organisational structure with a small corporate centre;
- Simultaneous loose-tight properties – high decentralisation around a strong core of corporate values.

The introduction and popularisation of quality awards further contributed to the diffusion of the Excellence concept.

Kanji (1998) defines Business Excellence as

> *"a means of measuring customer's, employer's and shareholder's (stakeholder's) satisfaction simultaneously within an organisation in order to obtain a comprehensive evaluation of the organisational performance".*

This definition calls attention to the measurement aspects of Organisational Excellence from the different stakeholders' point of view. Since this is at the same time a comprehensive and operational definition, it will be adopted for the purposes of this research.

It is reasonable to question whether and how OE and TQM are linked. In fact, the concepts are sometimes used indifferently, although most researchers (Savolainen, 2000) argue that Excellence is a status to be achieved using TQM approaches.

In this research, Excellence is associated with outstanding performance (in comparison to other organisations in the same industry, best competitors and past performance). In this sense, Excellence refers to organisational outcomes and achievements, whereas TQM is a set of principles and practices that guide the organisation. "Viewed through this lens, quality enables or drives organisational excellence and organisational excellence results – at least in part – from quality" (Dalrymple *et al.*, 1999).

One of our major propositions is that the application of TQM principles and core concepts leads to superior organisational performance. As described in later chapters, this association was empirically tested and validated in the context of the model proposed for the Portuguese municipalities.

2.4. REVIEW OF RELEVANT BUSINESS EXCELLENCE MODELS

A business excellence model aims to be a description of a comprehensive management system that is capable of producing superior performance (Barker, 2000).

In this section, we first analyse the contribution given by the well-known quality award-based models. Subsequently, KBEM is presented in some detail.

It is important to mention that several other models exist, which are not reviewed here. The rationale for discarding those frameworks has essentially to do with one or more of the following reasons: (1) they are not generic, i.e. where developed to address the situation of an organisation or a small set of organisations in particular; (2) they are not comprehensive, but rather look into specific areas of the organisation; (3) they do not comprise any kind of measurement instrument, and therefore are not relevant for the

purposes of the present research; and (4) there is not enough information available in the literature about how they work.

2.4.1. Quality award-based models - a critical examination

There are consistent indications that an increasing number of organisations (manufacturing/service; private/public; profit/non-profit) from different parts of the world have been adopting quality-award models as vehicles for TQM implementation. Several studies conducted in Europe, the USA, and Australia (Ghobadian and Woo, 1996, Pannirselvam and Ferguson, 2001, Wiele, 2000) support this idea. It is therefore important that those frameworks provide a sound foundation for TQM implementation, as well as a reliable methodology to assess the progresses achieved along the process.

In general, quality awards have been established to promote quality awareness and encourage organisations to conduct self-assessment exercises with the aim of evaluating performance, identifying areas for improvement and developing plans for further action (Pun *et al.*, 1999).

There is a number of well-recognised award models, the main ones being the Deming Application Prize in Japan, the Malcolm Baldrige National Quality Award (MBNQA) (NIST, 2000) in the US and the European Business Excellence Model (EFQM/BEM) (EFQM, 1999a, 1999b, 1999c) in Europe. For a brief comparison of the quality-award frameworks see Table 2.3.

	Deming Prize	MBNQA model	EFQM/BE model
Criteria	1. Policies 2. Organisation 3. Information 4. Standardisation 5. Human resources development and utilisation 6. Quality assurance activities 7. Maintenance 8. Improvement 9. Effects 10. Future plans	1. Leadership 2. Information and analysis 3. Strategic planning 4. Human resource focus 5. Process management 6. Business results 7. Customer and market focus	1. Leadership 2. Policy and strategy 3. People 4. Partnerships and resources 5. Processes 6. People results 7. Customer results 8. Society results 9. Key Performance results
Similarities and differences	Content – the Deming prize is clearly more oriented towards the so-called 'hard' components of TQM (techniques and tools) than either the MBNQA or the EFQM/BEM and, therefore, less comprehensive. Even criteria such as policies and future plans are primarily concerned with quality assurance and the elimination of defects (Bohoris, 1995) Structure – the Deming prize is not based on a framework linking concepts, activities, processes and results together (as it happens with the MBNQA and the EFQM/BEM). It simply provides a list of desirable quality-oriented management practices (Ghobadian and Woo, 1996).		
		Content - There is a good matching between the contents of the MBNQA and the EFQM/BEM. Major differences are to be found in (Zink *et al.*, 1994): • the EFQM/BEM 'partnerships and resources' criterion, which does not have a specific equivalent in the MBNQA; • the 'processes' criterion, which within the MBNQA is significantly more detailed; • the greater emphasis given by the EQM/BEM to the social responsibility of the organisation, through the 'society results' criterion, which, in the MBNQA, only exists as a sub-criterion of leadership	
		Structure • The EFQM/BEM explicitly distinguishes between 'enablers' and 'results'. This in itself contributes to identify which practices should be implemented so that superior results can be achieved in the different areas. Yet, there are some problems regarding the establishment of some links and, for instance, the 'customer results' criterion does not have a relevant 'enabler'. • The EFQM/BEM incorporates an innovation and revision cycle, thus highlighting the need to successively set higher targets and try to accomplish them.	

Table 2.3. Quality award-based models comparison

A large number of countries adopted, with minor changes, one of these models to develop their national and regional awards. As expected, the Portuguese Institute for Quality (IPQ) follows the EFQM/BEM model.

In the EFQM's case, a specific award for public sector organisations was launched in 1995 (EFQM, 1999d), whereas the Malcolm Baldrige Award is exclusively targeted into private sector companies. In spite of the existence of a public sector award within the European Quality Award, except for marginal linguistic adjustments (Larsen and Haversjo, 1998), the model criteria are practically identical.

Several researchers (Azhashemi and Ho, 1999; Dale *et al.*, 1997; Porter and Tanner, 1998; Ritchie and Dale, 2000; Wiele, 2000; Wilson, 1998; Wright, 1997) have pointed out some benefits of quality award models, especially the MBNQA and the EFQM/BEM:

- they provide a definition and description of TQM which improves quality awareness in all aspects of the business and generates ownership among senior managers and employees;
- they assess the extent to which TQM principles have been implemented throughout the organisation;
- they are comprehensive, considering the whole organisation and its various activities, practices and processes;
- they encourage an holistic view of organisations, by stressing the need to look simultaneously at a variety of dimensions that interact with each other;
- they drive continuous improvement based on a common approach across the organisation;
- they promote self-assessment based on evidence;
- they make organisations realise that processes are at least as important as outcomes;
- they replace the traditional command and control view of senior management's role with that of enabling through effective leadership; and
- they facilitate benchmarking and organisational learning based on internationally recognised criteria.

However, quality award models have also important limitations, both as conceptual models and, specially, as measurement models. Due to these shortcomings, we prefer to refer to them as frameworks rather than models in the more rigorous sense of the word.

Both the MBNQA and the EFQM/BEM implicitly assume there are causality links between TQM elements and results (Ghobadian and Woo, 1996). In the quality award frameworks, the theoretical components of TQM are usually covered in the 'enablers' part (though, only the EFQM/BEM explicitly uses this term). The enablers represent the TQM practices that are expected to lead to outstanding results in terms of customer satisfaction, profitability, low employees' turnover, etc. However, the real impact of changes in the enablers on the results is often difficult to establish, due to the complex interdependencies between the criteria and the lack of clarity of some model relationships.

The ability of such frameworks to measure progress on TQM implementation and OE can, in our view, be questioned. It is doubtful that their scoring criteria provide objective measurement and, consequently, help to clearly identify improvement opportunities.

The quality award-based frameworks were not developed using a scientific approach, based on the identification and validation of CSFs, but rather mainly result from the assembling of *ad hoc* evidence and successful case stories. They are not based on systematic empirical evidence (Black and Porter, 1996).

It may be argued, as Silvestro (2001) emphasises, that quality awards models have other purposes (such as contributing to the dissemination of TQM and best practices identification) and do not explicitly intend to "unpack the constituent elements of TQM in such way as to facilitate the empirical study of TQM in different operational contexts".

From a measurement point of view, when weights are attached to each criterion they are arbitrary and do not necessarily reflect the relative importance of each model construct. In other cases, as it happens with the most recent versions of the EFQM/BEM, weights are not explicitly suggested and the onus of responsibility for the scoring process – called RADAR (EFQM, 1999b) - rests on assessors and juries, thus being highly subjective. Consequently, the final business excellence score cannot be easily replicated or generalised. This is an important limitation, particularly when the model is used as a benchmarking tool.

One possible argument for the lack of a standardised weighting system is that the importance of each dimension depends on the nature of each business environment. However, the existence of weights provides important indications on where to focus the improvement efforts.

In the absence of clear relationships among the criteria and correspondent weights, the impact that any change in one particular criterion has on other components of the model and on business excellence is difficult to predict, making the prioritisation of the improvement efforts somehow ambiguous.

Table 2.4 provides a summary of the main strengths and shortcomings associated with major quality award-based frameworks. Deming's Application Prize was not explicitly considered, since, as mentioned earlier, it is not (and does not intend to be) a comprehensive TQM model. It merely gives a list of good quality practices without making any attempt to inter-relate them.

	Strengths	**Shortcomings**
Aims and purposes	• increase quality awareness • encourage self-assessment against well-established criteria • facilitate benchmarking and organisational learning • catalyst for improvement and change	• posterior performance of winning companies does not consistently support the claim that TQM effectively leads to competitive success • lack of customisation and detailed guidelines for public organisations and SMEs
Conceptual	• promote a holistic and process-based view of the organisation • linkage between inputs, processes and outputs	• criteria emerged from *ad hoc* empirical evidence and do not necessarily reflect the CSFs • criteria were not tested for construct validity
Measurement	• diagrammatic representation	• do not comprise a mathematical formulation and therefore relationships among the criteria cannot be estimated • subjective scoring system • lack of empirical testing and validation

Table 2.4. Strengths and shortcomings of major quality award-based frameworks

Several studies have attempted to empirically validate the quality award models (either as a whole or partially, i.e. looking at specific relationships between a limited number of criteria). Most of these works (Black and Porter, 1996; Curkovic *et al.*, 2000; Flynn and Saladin, 2001) concentrate on the MBNQA although a few exceptions exist (Nabitz *et al.*, 2001).

Using a structural equation modelling approach, Curkovic *et al.* (2000) investigated the extent to which the MBNQA adequately captures the relevant TQM dimensions and whether there is a good fit between the factors of the model and their measures. With this purpose, a large survey was conducted in the automotive industry. The study operationalised the MBNQA in terms of four major constructs. For each construct, a number of metrics consistent with the MBNQA were generated. The results showed that the measures did indeed load on the appropriate constructs. All the scales were highly correlated with the primary outcome factor of TQM results. Moreover, all causal paths in the hypothesised model were found to be statistically significant and positive. This contradicts findings from a earlier study based on the 1992 MBNQA framework, which indicated that the model was not a good fit, with many non-significant paths (Flynn and Saladin, 2001).

Another research studied mentioned in Behara and Gundersen (2001) intended to establish the validity of the MBNQA framework in the higher education context. Their results suggest that the individual dimensions of the Baldrige Award are appropriate. Even so, path analysis indicates that the relationships among the criteria are different from those proposed in the Baldrige model. Based on their findings, the researchers developed an alternative model and concluded that leadership affects the outcomes by mediating effects through the organisational systems. However, their study is based on a single university and, therefore, generalisation is problematic.

With reference to the Arizona Governor's Quality Award (AGQA) – which closely follows the MBNQA structure –, Pannirselvam *et al.* (1998) carried out a study to examine issues of content, construct and model predictive validity. Content validity was assessed based on a review of relevant literature. Construct and predictive validity were tested using data collected from applicants to the 1993 AGQA. The sample included 19 manufacturing businesses, 36 service businesses, 4 health care organisations, 4 educational institutions, and 6 government agencies. Reliability was established through high Cronbach-alpha coefficients. Factor analysis results indicate that the items under each category measure a single dimension. Predictive validity was tested by performing a canonical correlation, which in fact revealed a high association between items belonging, respectively, to the approach set and to the results set.

Another publication (Pannirselvam and Ferguson, 2001) further explores the causal relations underlying the MBNQA. In this latest work, the MBNQA was represented as an eight-construct model. Path analysis was used to assess the strength of the relationships between the quality management constructs. Fit indices indicate an acceptable fit between the proposed model and the data. Findings show that leadership significantly affects (either directly or indirectly) all other constructs, thus confirming its critical role for TQM implementation, as emphasised in the MBNQA. Customer focus and relationship management were found to be the greatest determinants of organisational performance.

Similarly, Flynn and Saladin (2001) investigated whether the relationships between the MBNQA constructs hold and analysed the extent to which the weights assigned to the various model dimensions were appropriate. A survey analysis was conducted in a sample of manufacturing plants in the US, Germany, Japan, and Italy. The items selected for the questionnaires were not, however, direct measures of the Baldrige categories. Factor analysis was used and the reliability and validity of the scales examined. According to the path analysis results, all the Baldrige frameworks analysed – 1988, 1992 and 1997 – include robust relationships. Moreover, the changes made to the model over the years were found to have been beneficial. Results suggest that managers should focus on three critical drivers of quality performance: leadership, process management and information and analysis.

With reference to the EFQM/BEM, an attempt to scientifically validate the proposed criteria was conducted by the EFQM in 1997 using concept mapping (Nabitz *et al.*, 2001). Following a literature review on relevant TQM frameworks, statements were generated. These were rated and grouped into internally consistent clusters. A statistical analysis produced a series of cluster maps. Overall, the findings gave credit to the (then) existent EFQM model, but called attention to the need of further stressing aspects such as market focus, customer, partnerships and measurement system (Nabitz *et al.*, 2001). At some extent, these results were taken into account in the most recent revision of the EFQM/BEM.

In any case, in order to have more definitive indications about the validity of the quality award-based models further replication studies, using consistent methods for data collection and analysis, are necessary. In our opinion, these frameworks have, however, a major drawback that is difficult to overcome – they lack a strong theoretical foundation.

2.4.2. Kanji's Business Excellence Model (KBEM)

Kanji (1998) proposes a business excellence model comprising a set of TQM principles and core concepts which potentially lead to Excellence. Leadership is the prime of the model and thus responsible for driving TQM implementation. The model includes four principles – delight the customer, management by fact, people-based management, and continuous improvement. Each TQM principle operates on two core concepts.

To enable measurement, Kanji's pyramid model (Kanji, 1996) was converted into the structural model depicted in Figure 2.2.

Figure 2.2. Kanji's Business Excellence structural model

(Kanji, 1998)

It follows a brief description of each component of Kanji's Business Excellence Model (KBEM).

Leadership

Leadership is the prime requisite for putting TQM principles and core concepts into practice (Kanji, 2002).

In fact, senior managers commitment has been described as the most important determinant of successful TQM implementation (Adebajo and Kehoe, 1998; Dale *et al.*, 1997; Flynn *et al.*, 1995; Grant *et al.*, 1994; Salegna and Fazel, 2000).

Leaders have major roles in developing and implementing the organisation values, vision, mission and strategy in line with the TQM philosophy.

In addition, organisations need a management structure that facilitates TQM deployment (Mehra *et al.*, 2001) and putting that in place is another key leadership responsibility.

Top management behaviour gives employees vital signals of the importance of TQM implementation. To encourage everyone's commitment to continuous improvement, senior managers must be personally involved in the introduction and development of TQM (Dale *et al.*, 1997).

The different roles and dimensions of leadership in a TQM organisation will be discussed in detail within the model developed for measuring Leadership Excellence (see Chapter 7).

Delight the Customer

TQM is, by definition, a customer-oriented philosophy (Mehra *et al.*, 2001). Delight the customer involves, first of all, identifying who the customers are. Both *external customers* and *internal customers* must be considered. Expectations are dynamic in nature (Ahire *et al.*, 1996). Therefore, an organisation must be in close contact with its customers (Dean and Bowen, 1994) and have in place mechanisms to determine their expectations and measure their levels of *satisfaction*.

External customer satisfaction

TQM stresses the importance of involving everyone in the process of "customer driven" continuous improvement (Kirkpatrick and Lucio, 1995a).

Organisations should not assume they know what their customers want and expect from them. On the contrary, they are required to collect customer feedback (through surveys, focus groups, etc) and use that information to effectively improve.

Measurement of customer requirements is thus an important part of customer satisfaction. Not only it helps quality improvements to be focused on those aspects that customers value most, but also it serves as a tool to foster cross-functional cooperation (Hackman and Wageman, 1995).

Internal customer satisfaction

External customer focus is not enough. Many writers emphasise the need to get internal relationships working properly in order to satisfy the external customer (Kanji, 2002).

TQM recognises that everyone in the organisation provides a service and has its own customers. Accordingly, "anyone with whom an employee has a job-related relationship" is a customer (Mohr-Jackson, 1998).

Internal customer satisfaction basically is the degree to which employees believe that their needs are systematically taken into consideration and, as much as possible, being met (Sureshchandar *et al.*, 2001).

Management by Fact

Data based management is indispensable to informed decision-making and performance improvement.

In order to improve decision-making, TQM calls for systematic collection, analysis and report of quality facts (Dahlgaard *et al.*, 1998; Hackman and Wageman, 1995; Mehra *et al.*, 2001). Dissemination of information on performance is critical to encourage innovation and learning.

Management by fact requires a strong emphasis on process management. Within an organisation, *all work is process* and therefore can be mapped, analysed and streamlined. *Measurement* of the key business processes is essential.

All work is process

TQM views an organisation as a set of processes (Spencer, 1994). For every process, customers' requirements and expectations must be identified.

As Hackman and Wageman (1995) point out, the quality of the products and services delivered depends, above all, on the processes by which they are designed and produced.

Within process management, variability is undesirable. It is a source of nonconformity and waste and, consequently, needs to be reduced and controlled. Various statistical methods are used with that purpose. However, to be effective, quality control techniques should not be exclusively used by specialists, but rather

applied by the whole staff on their daily activities (Forza and Filippini, 1998). In this sense, education and training on TQM tools is crucial.

Measurement

A good quality information system, which provides timely, reliable and relevant measurements, is essential to support management by fact and guide improvement. Measurement of processes, external customer satisfaction, and internal customer satisfaction is fundamental (Dahlgaard *et al.*, 1998) and must be conducted on a regular basis.

To promote organisational excellence, such measurements need to be integrated.

People-based management

People make quality, providing that they are given the necessary resources and rewarded for their achievements.

Research has often shown that customer satisfaction and employee commitment are highly correlated. Therefore, obstacles that prevent employees from doing a good job must be removed and education and training provided (Dahlgaard *et al.*, 1998).

By creating the need to meet customer requirements and to continuously improve, TQM provides people with opportunities to learn and develop new skills.

TQM requires a new set of competences. The changes in working practices demanded by TQM are only possible if adequate training is provided to everyone in the organisation.

People perform better if they work in a cooperative and friendly environment. Moreover, the nature of most organisational problems requires a high degree of inter-functional interaction. Therefore, *Teamwork* should be encouraged and developed.

People Make Quality

The idea that People Make Quality arises from the conviction that employees are "able to derive pride of workmanship, satisfaction and committed from the work they do" (Anderson *et al.*, 1994a). TQM assumes that people naturally want to do a good job and will try to improve, as long as they are provided with the necessary training and resources (Grant *et al.*, 1994; Hackman and Wageman, 1995). Employee involvement in continuous improvement is essential, as the best process

innovation ideas usually come from people who actually perform the job (Thiagarajan and Zairi, 1997a).

Thus, quality improvement can only be achieved if all staff is given the space and responsibility to innovate and make decisions (Kirkpatrick and Lucio, 1995a). Empowerment techniques are often associated with the idea of making everyone participate in continuous improvement. For that to happen, education and training is essential. It must promote TQM awareness, a common language and a better understanding of quality concepts and principles (Dale *et al.*, 1997).

Furthermore, meaningful and opportune feedback must be provided so that employees know how they are performing and which aspects they primarily need to improve on (Forza and Filippini, 1998).

Teamwork

Teamwork is universally accepted as a key mechanism for involving people in quality improvement (Adebajo and Kehoe, 1998: Dale *et al.*, 1997).

Moreover, teams are commonly regarded as good alternatives to deal with complex problems, which require multi-disciplinary approaches (Mehra *et al.*, 2001). Cross-functional teams have more talent available to address issues that are not confined to a particular organisational sphere.

Teamwork builds collective responsibility, develops trust and facilitates co-operation.

Continuous Improvement

Continuous improvement calls for a climate that is conducive to learning and requires an organisational culture that constantly encourages members to innovate.

Since this is a never-ending journey, a *continuous improvement cycle* must be in place. Improvement comes from learning with mistakes, implementing corrective actions and, based on the feedback gathered, trying new things.

Inter-functional design and statistical tools are essential to support a *prevention* attitude.

Continuous Improvement Cycle

The continuous improvement principle cannot be effectively implemented unless the organisation creates a supportive environment, by minimising fear and providing members with a rich and diverse set of tools.

Benchmarking should be encouraged and the best practices communicated throughout the organisation (Hackman and Wageman, 1995).

Additionally, improvement opportunities must be continuously identified and feedback collected from external and internal customers.

Prevention

Prevention avoids problems from happen. Simplicity of product and service design is part of a prevention attitude, minimising the likelihood of errors to occur and enhancing product reliability and serviceability (Flynn *et al.*, 1995).

Quality design should include the formation of cross-functional teams with the participation of customers, whenever possible (Forza and Filippini, 1998).

To drive failures out of the system several tools, such as the Failure Mode and Effect Analysis (FMEA), need to be applied.

2.5. SELECTION OF KBEM AS THE BASIS FOR MEASURING ORGANISATIONAL EXCELLENCE IN THE LOCAL GOVERNMENT

In this section, the choice of KBEM as the basis for assessing Organisational Excellence in the Portuguese municipalities is explained, based on its properties both as a conceptual and a measurement model.

Conceptually, a business excellence model should be based on the key TQM elements, using a critical success factors (CSFs) approach.

According to Rockart (1979, quoted in Kanji 2002), CSFs are "the limited areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization". CSFs can also be described as "those variables that management can influence through its decisions that can affect significantly the overall competitive positions of the various firms in an industry" (Kanji, 2002).

CSFs play an important role for implementing the organisation's mission (Oakland, 1999) and are essential elements in the development of a firm's strategy (Leidecker and Bruno, 1984).

The CSFs concept has been applied in different studies. For the purposes of this research, following a CSFs approach implies, first of all, identifying those *vital few* dimensions that are supposed to have a major impact on organisational performance and, then, including them in the measurement of OE.

Since we believe that OE is tightly linked to the implementation of TQM, we are interested in ensuring that the major TQM elements are incorporated in the organisational excellence model.

Given that there is not a unique, consistent and integrated TQM theory, a possible way of examining the suitability of KBEM is comparing its principles and core concepts with those key TQM variables proposed in the literature.

When identifying the critical factors of quality management, most authors have reviewed the works of the quality gurus, in particular the writings of Deming, Juran and Crosby (see Table 2.1). Interesting studies are reported in the literature (Dale *et al.*, 1997; Kaye and Rosalyn, 1999; Mohr-Jackson, 1998; Motwani, 2001; Porter and Parker, 1993; Schonberger, 1992; Zeitz and Johannesson, 1997; Zhang *et al.*, 2000). However, the large majority of those studies identify the key TQM components based on an extensive literature review, but do not use any scientific approach to test and validate them. Several other studies also present a list of TQM critical factors, but their emphasis is on investigating the potential link between TQM and performance (Forza and Filippini, 1998; Powell, 1995; Samson and Terziovski, 1999) and do not give identical attention to the processes of generating the constructs and testing their validity.

It would be virtually impossible to review all the research works that have been conducted, in different contexts, with the purpose of identifying the critical quality factors. Therefore, we restrict here our analysis to those well-established studies that are general in nature (i.e. that aim to identify key TQM elements that are not firm or industry-specific) and use some kind of statistical approach to validate the CSFs proposed.

Table 2.5 summarises the main empirical studies reported in the literature. It can be observed, that, in the identification of the CSFs proposed, many researchers have conducted an extensive literature review, often combined with an analysis of major quality award frameworks, to derive a set of items (principles, concepts and practices) commonly associated with TQM. In most instances, factor analysis (usually exploratory) was then carried out to discover the underlying dimensions of TQM. As Table 2.5 indicates, some studies went further than others in terms of validating the TQM constructs. However, the dominant shortcoming is the lack of explicit consideration of the relationships among the TQM dimensions and their collective influence on OE.

From Table 2.5, looking at the CSFs as a whole, it is possible to conclude that there is a substantial agreement among the most prominent quality researchers about the main TQM constructs. In particular, there is a general consensus regarding the importance of leadership and employee involvement for effective TQM implementation (Thiagarajan *et al.*, 2001). These elements, given their criticality to initiate the quality journey, constitute what Thiagarajan *et al.* (2001) designate as "stage one key organisational requirements".

Research study	CSFs proposed	Approach for the identification of the CSFs	Validation procedures	Sample	Major strengths (+) and shortcomings (-)	Further validation
[1] Saraph *et al.* (1989)	(1) Top management leadership; (2) Quality data and reporting; (3) Role of quality department; (4) Training; (5) Employee relations; (6) Supplier management; (7) Process management; and (8) Product/service design.	Literature review; judgmental process of grouping similar requirements of quality management	Review by a large panel of managers; Cronbach alpha for scale refinement	162 mangers from a diversity of manufacturing and service industries	+ pioneering nature of the research + external validity - failure to consider issues related to customer focus and satisfaction. - relationships among the constructs were not analysed	Benson *et al.* (1991) in their study of the effects of organisational context on quality management also found reliability scores for the CSFs proposed above 0.7; Badri *et al.* (1995) found evidence of the relevance of the constructs in the United Arab States; Joseph *et al.*'s (1999) study conducted on business units in India added new items to Saraph's *et al.* instrument and through factor analysis derived ten dimensions of TQM that essentially correspond to those identified by Saraph *et al.* (1989); Quazi *et al.* (1998) replicated the study in Singapore having found that only three factors were unifactorial
[2] Anderson *et al.* (1994a, 1994b)	(1) Visionary leadership; (2) Internal and external co-operation; (3) Learning; (4) Process management; (5) Continuous improvement; (6) Employee fulfilment; and (7) Customer satisfaction.	Delphi study on Deming's fourteen points; the resulting 37 concepts were then cluster to form the final list of 7 TQM constructs	Path analysis to investigate the relationships among the constructs	41 plants from the USA and Japan	+ potential relations among the TQM critical factors were explored - less comprehensive, since it is based only on Deming's writings - lack of reported evidence to support the scales development and validation - only two paths were statistically significant	Rungtusanatham *et al.* (1998) replicated the study in Italy in three different industries – machinery tools, electronics, and transportation, involving 43 plants; only three of the eight hypotheses tested were not supported by the data

[3] Flynn *et al.* (1994)	(1) Quality leadership; (2) Feedback; (3) Quality improvement; (4) Rewards; (5) Selection for teamwork and potential teamwork; (6) Inter-functional design process; (7) Supplier relationships; (8) Process control; (9) Cleanliness and organisation; and (10) Customer interaction	Literature review; exploratory factor analysis	Cronbach alpha; loadings and correlation analysis	42 manufacturing firms; multiple responses by plant	+ considerable rigour in the use of statistical measures to validate the constructs - relationships among TQM variables were not specified	Flynn *et al.* (1995) investigated the relationship between TQM dimensions and performance. In that study, the critical factors were grouped into eight categories comprising core quality management practices and infrastructure for quality management. Scale reliability and validity were further supported. Top management support was found to be the most important requisite for TQM implementation.
[4] Ahire *et al.* (1996)	(1) Top management commitment; (2) Customer focus; (3) Supplier quality management; (4) Design quality management; (5) Benchmarking; (6) SPC usage; (7) Internal quality information usage; (8) Employee involvement; (9) Training; (10) Employee empowerment	Literature-based; empirically-tested elements of TQM strategies	CFA; Cronbach's alpha; Werts-Linn-Jorsekog coefficient; Bentler-Bonett coefficient; chi-square difference test; correlation with product qual.	371 firms from the automobile and auto components industry	+ scales were comprehensively refined and validated - relationships among the constructs were not investigated - focus on a single industry	
[5] Black and Porter (1996)	(1) corporate quality culture; (2) strategic quality management; (3) quality improvement measurement system; (4) people and customer management; (5) operational quality planning; (6) external interface management; (7) supplier partnerships; (8) teamwork structures; (9) customer satisfaction orientation; (10) communication and improvement information.	MBNQA complemented with literature review; factor analysis conducted on 39 items	Cronbach alpha, split-halves test, unifactorial tests, and factor item-factor correlations (loadings) analysis.	263 questionnaires collected from 33 organisations	+ diversity of statistical measures employed to assess construct validity and reliability - relationships among the constructs were not investigated	

[6] Adam *et al.* (1997)	(1) employees' involvement; (2) strategies and senior executive involvement; (3) employee satisfaction; (4) compensation and recognition; (5) customer focus; (6) design and conformance; (7) quality knowledge; (8) pre-employment screening; (9) inventory reduction	Factor analysis conducted on a set of items derived from Saraph's *et al.* (1989) instrument and MBNQA.	Cronbach alpha	Manufacturing firms from 3 regions: Asia/South Pacific, Europe and North America	+ width of the study + country comparisons - sample size - construct validity and reliability are reported only based on Cronbach alpha	
[7] Zhang *et al.* (2000)	(1) Leadership; (2) Supplier quality management and quality policy; (3) Vision and plan statement; (4) Evaluation; (5) Process control and improvement; (6) Product design; (7) Quality system improvement; (8) Employee participation procedures; (9) Recognition and reward; (10) Education and training; (11) Customer focus	Literature review	Exploratory factor analysis; Cronbach's alpha; Item-correlation analysis	202 Chinese manufacturing companies representing 7 different sectors; large, medium-sized and small firms	+ the reliability of the scales was established using several procedures + external validity - relationships among the constructs were not investigated	
[8] Mehra *et al.* (2001)	(1) human resource focus; (2) management structure; (3) quality tools; (4) supplier support; (5) customer orientation	Literature review	Review by an expert panel formed by senior managers	Large manufacturing firms	+ exhaustive literature review - absence of statistical reported validation of the constructs - recognises that criticality ranking depends on the business, but the methodology applied does not allow these priorities to be determined.	
[9] Behara and Gunderson (2001)	(1) compensation; (2) benchmarking; (3) training management; (4) empowerment; (5) technology management; (6) assessment; (7) process measurement; (8) participation; (9) teamwork; (10) training	Literature-based; extracted using factor analysis on 69-item questionnaire	Cronbach-alpha; factor loadings and correlation analysis	170 US service organisations	+ the reliability of the constructs was established using several procedures + sample size and service sector - leadership did not emerge as a construct - relationships among the constructs were not investigated	

Table 2.5. Summary of the main empirical studies on the critical factors of TQM

Since KBEM encompass the large majority of the critical factors proposed by most researchers (see Table 2.6), one can conclude that it has content validity and its dimensions collectively represent all the relevant aspects of quality management in an organisation.

CRITICAL SUCCESS FACTORS	**COVERAGE IN KBEM**	
Top management leadership [1] [7] Visionary leadership [2] Quality Leadership [3] Top management commitment [4]	Y Y Y Y	LEADERSHIP
Strategic quality management [5] Strategies and senior executive involvement [6] Vision and plan statement [7]	Y Y Y	
Operational quality planning [5]	Y	
Management structure [8]	Y	
Customer focus [4] [6] [7] Customer orientation [5] [8] Customer Interaction [3]	Y Y Y	DELIGHT THE CUSTOMER
Customer Satisfaction [2]	Y	EXTERNAL CUSTOMER SATISFACTION
Employee satisfaction [6]	Y	INTERNAL CUSTOMER SATISFACTION
Employee fulfilment [2]	Y	PEOPLE BASED MANAGEMENT/ INTERNAL CUSTOMER SATISFACTION
People and customer management [5]	Y	PEOPLE BASED MANAGEMENT/DELIGHT THE CUSTOMER
Human resource focus [8] Employee relations [1] Pre-employment screening [6] Compensation/recognition and rewards [3] [6] [7] [9]	Y Y Y Y	PEOPLE BASED MANAGEMENT
Employee empowerment [4] [9]	Y	PEOPLE BASED MANAGEMENT/ PEOPLE MAKE QUALITY
Employee participation and involvement [4] [6] [7] [9]	Y	PEOPLE MAKE QUALITY
Education and Training [1] [4] [9] [7] [9]	Y	
Quality knowledge [6]	Y	
Teamwork structures [3] [5] [9]	Y	TEAMWORK
Internal and External co-operation [2]	+/-	
Internal quality information usage [4]	Y	MANAGEMENT BY FACT
Quality data and reporting [1] Communication and improvement information [5] Quality Improvement Measurement System [5]	Y Y Y	MANAGEMENT BY FACT/ MEASUREMENT

Process management [1] [2] Process Control and Improvement [3] [7] SPC usage [4]	Y Y Y	ALL WORK IS PROCESS
Supplier management [1] [4] [7] Supplier relationships and partnerships [3] [5] Supplier support [8]	+/- +/- +/-	
External interface management [5]	+/-	ALL WORK IS PROCESS/DELIGHT THE CUSTOMER
Process measurement [9] Evaluation and assessment [7] [9]	Y Y	MEASUREMENT
Feedback [3]	+/-	MEASUREMENT/CONTINUOUS IMPROVEMENT CYCLE
Learning [2] Continuous Improvement [2]	Y Y	CONTINUOUS IMPROVEMENT
Corporate quality culture [5]	+/-	
Quality system improvement [3] [7]	Y	CONTINUOUS IMPROVEMENT/MANAGEMENT BY FACT
Quality tools [8] Benchmarking [4] [9]	Y Y	CONTINUOUS IMPROVEMENT CYCLE
Product and service design [1] [4] [7] Design and conformance [6]	Y +/-	PREVENTION
Inter-functional design process [3]	Y	PREVENTION/TEAMWORK
Role of the quality department [1]	N	
Cleanliness and organisation [3]	N	
Inventory reduction [6]	N	
Technology management [9]	N	

Note: Numbers in brackets refer to the correspondent empirical study in Table 2.5.

Table 2.6. TQM critical factors in KBEM

As shown in Table 2.6, the large majority of the critical factors identified in the literature are adequately covered in KBEM. The ones that do not find a good match in KBEM are not, in fact, 'true' quality concepts, but rather form part of the quality infrastructure – corporate quality culture, technology management, cleanliness and organisation – or refer to particular outputs (inventory reduction). Concerning the role of the quality department, though it is recognised that a structure for managing quality should exist, the current view is that quality is everyone's responsibility. It can also be seen that the CSFs proposed in the literature have a strong focus on leadership and human resource management aspects. Regarding leadership, KBEM proposes a much wider understanding of the concept, embracing strategic and policy development issues as well. Other CSFs, such as internal customer satisfaction and continuous improvement, in particular, are also more extensively covered in KBEM.

To reinforce the inclusiveness of KBEM, it is possible to compare its contents with those of major quality award-based frameworks, such as the MBNQA and the EFQM/BEM.

Figure 2.3 and Figure and 2.4 depict side-by-side the core concepts of KBEM the and respectively, the MBNQA and the EFQM/BEM criteria. To simplify the diagrammatic representation, the KBEM principles are not explicitly included. However, since each principle operates in two concepts, the former are indirectly represented.

Important similarities exist between KBEM, the MBNQA and the EFQM/BEM. All of them recognise that leadership plays the key role in creating the structures and infrastructures necessary to support TQM. Moreover, they all stress the importance of developing human resources and process management and emphasise, in this regard, the criticality of education and training.

Figure 2.3 shows that is generally a good match between the MBNQA and KBEM (Kanji, 2002). KBEM does not have a "strategic planning" criterion, but most of the issues proposed in the MBNQA model are covered in KBEM in the leadership dimension. As Chapter 7 explains in detail, we think that this solution makes more sense, since strategic planning is a major component of the leadership role. On the other hand, MBNQA does not explicitly consider internal customers satisfaction, which, in our opinion, is a main drawback. Furthermore, KBEM puts a greater emphasis on the creation of a continuous improvement culture by incorporating two criteria addressing this aspect: continuous improvement cycle and prevention.

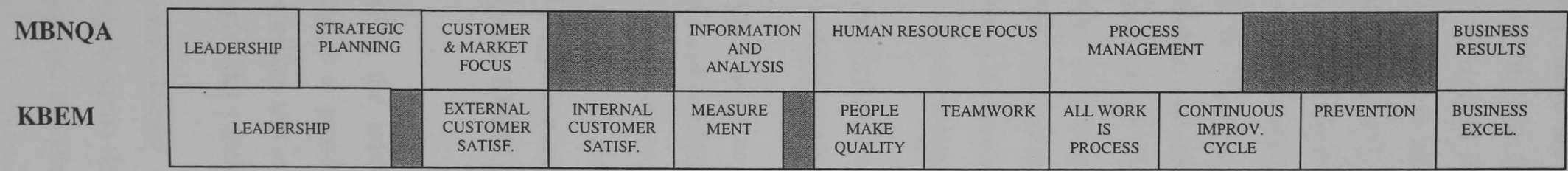

Figure 2.3. MBNQA and KBEM comparison

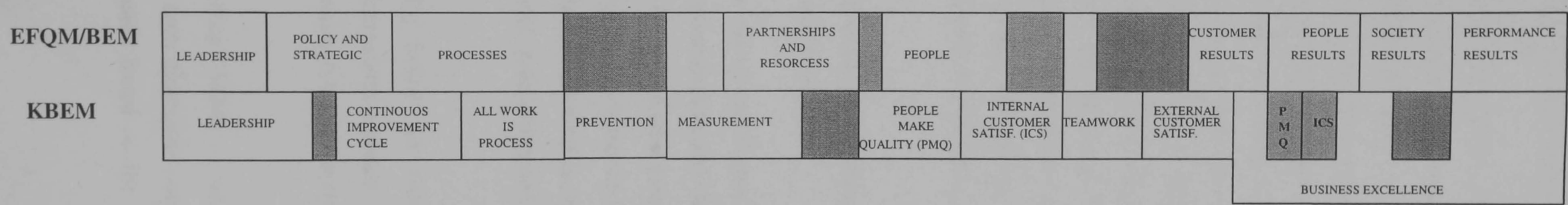

Figure 2.4. EFQM/BEM and KBEM comparison

Similarly, there are many commonalities between the EFQM/BEM and KBEM (Kanji, 2002). In this case (see Figure 2.4), there is not always a one-to-one correspondence, due to the differences in the models' structure. The EFQM/BEM makes a clear separation between enablers and results, and thus has in several areas (such as people) two criteria. In KBEM Business Excellence is the fundamental outcome criterion, covering most of the results part of the EFQM/BEM, with the possible exception of society results. This does not mean, however, that concerns with the impact on society are absent from KBEM. They need to be reflected in the organisation's policy and strategy. In fact, in what this research is concerned, the impact of Local Government in the community is so important that is at the very core of the municipalities' mission. Therefore, for the Local Government, in particular, local communities, by the way they influence leaders' actions and behaviours, are a major part of the path towards Organisational Excellence. Finally, the dark grey areas in Figure 2.4 also show that KBEM includes principles, such as prevention and teamwork, which are not adequately covered in the EFQM/BEM.

As a measurement model, KBEM overcomes some important pitfalls that quality award-based frameworks have in the measurement of OE (see section 2.4.1).

First, the use of an assessment tool in the form of a survey-based questionnaire (as it happens within KBEM), facilitates the self-assessment exercise (Lee and Quazi, 2001) and removes part of the subjectivity of the scoring process associated with most quality award frameworks. The possibility of customising the questionnaire to better fit the specificities of each organisation also adds flexibility to the approach. Additionally, as Kanji (2002) emphasises, KBEM generates results that can be replicated, generalised and compared over time.

In KBEM, the interactions between the critical quality factors are clearly shown and therefore it is possible to analyse how each TQM dimensions impacts OE. Moreover, KBEM makes use of a methodology that permits to meaningfully define the weights to be assigned to the various criteria.

Such methodology – the Structural Equation Modelling (SEM) –, which Chapter 5 describes in some detail, determines statistically how each dimension contributes to OE. Furthermore, the coefficients of the model are estimated based on the actual data set

obtained from each organisation, and, thus, are more representative of its reality than any standard system of weights.

As explained later, SEM is a stochastic methodology that allows for uncertainty, specification and measurement errors to be taken into account in the estimation process. Moreover, since the relationships are determined simultaneously, the internal consistency between the different parts of the model is ensured. Additionally, SEM handles multicollinearity problems reasonably well. This is one important advantage, given the expected strong interrelations between the TQM elements that form KBEM.

By explicitly examining the relationships between the critical factors, KBEM goes beyond most of the empirical studies reviewed in Table 2.5. Because of its mathematical formulation and its use of the SEM approach, KBEM can be extensively tested and validated using data collected in different contexts.

At some extent, the superiority of SEM to represent and measure OE is demonstrated by its recent use as a methodology to validate and potentially improve well-known quality frameworks, such as the MBNQA and the EFQM/BEM. Some of the studies conducted with this purpose were described in section 2.4.1.

KBEM, however, has not only the advantage of being a pioneer in this regard, but also of using SEM capacities to the full, both at improving the quality of the measurement scales and at measuring the levels of excellence achieved by the organisation in each CSF.

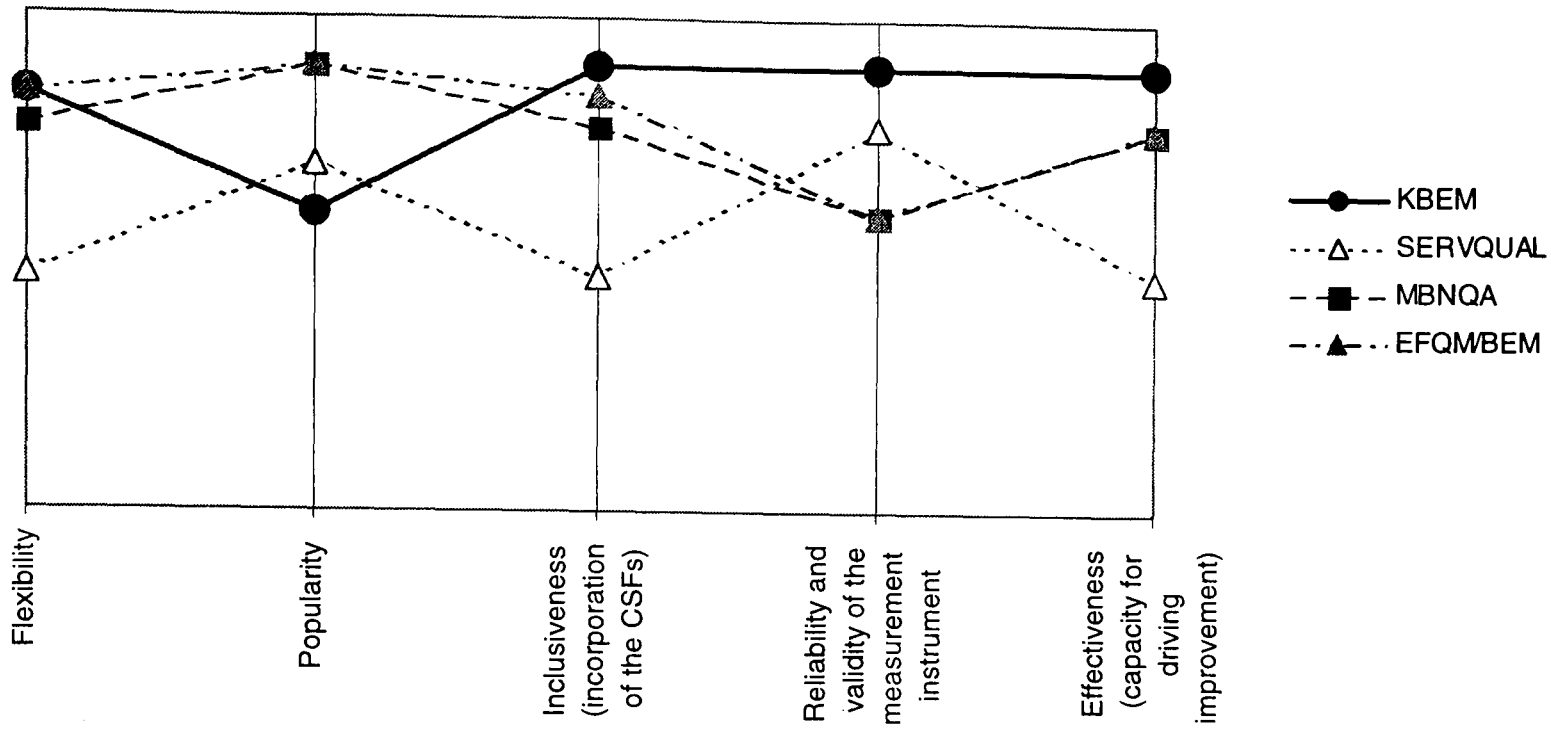

Figure 2.5 Comparative assessment of KBEM vs. major competing models

All in all, as Figure 2.5 illustrates (author's own personal evaluation), KBEM was found to be superior to other competing frameworks, since it adequately covers the key TQM principles and complies with the main criteria of a scientific modelling approach. It is not as well established as other frameworks, but this relative disadvantage is more than compensated by the possibility it offers of simultaneously analysing performance in the different CSFs, demonstrating causal connections among the model constructs and measuring their collective impact on Organisational Excellence.

2.6. CONCLUSION

This chapter discussed the fundamentals of Total Quality Management (TQM), seen, in this research, as the main path to achieve Organisational Excellence (OE).

The contribution of different TQM practices to superior performance is, therefore, a major topic of study. However, as emphasised in the literature, the lack of an integrated and consistent TQM theory puts considerable difficulties in conducting sound and generalisable empirical studies.

When reviewing the existing Business Excellence models, we found that some of the frameworks are not comprehensive, while others, in spite of being conceptually embracing,

do not make use of a sound methodology for empirical testing and validating the relationships proposed.

Kanji's Business Excellence Model (KBEM), on its turn, incorporates the main critical success factors of TQM (including those of service quality), as proposed by major researchers, and has the additional advantage of being validated by suitable data through the use of appropriate statistical techniques. Its methodological support essentially comes from the use of the structural equation modelling (SEM) approach (see Chapter 5).

To sum up, KBEM has several characteristics that make it appropriate to accomplish the purposes of this research:

- It is comprehensive embracing the critical elements of TQM, including both "hard" and "soft" quality management practices (Thiagarajan *et al.*, 2001);
- It is focused on both processes (the *hows* of OE) and results (the actual outcomes);
- It is holistic and, thus, consistent with our view of Local Government organisations as systems made of parts that interact with another;
- It is generic (since the TQM principles and core concepts are believed to be universal), but can easily be customised in order to fit the Local Government context – its culture, values, history, and stakeholders;
- It uses a sound methodology which, among other benefits, is able to verify the reliability of the scales used in the measurement of OE;
- It is simple to use, in the sense that it has a clear structure and follows a straightforward approach, which produces results that are easy to interpret;
- Since it is generic and leads to numerical scores for each critical factor and OE, its results are comparable both within the organisation over time (to analyse improvement trends) and with other organisations (to support benchmarking); and
- It promises to be suitable for the Local Government, since previous studies (Tambi, 2000; Lan, 2000) conducted in rather distinct contexts revealed that the constructs of KBEM were valid and, potentially, good predictors of OE.

Additionally, as Kanji (2002) points out, KBEM is also the first 'real' improvement model, since, besides assessing the organisation against a set of criteria, it highlights, in a concrete and measurable way, the consequences that changes in any model dimension have on Organisational Excellence. As we argued earlier, models such as the EFQM/BEM or the

MBNQA do not measure the interactions between the criteria and therefore make the prioritisation among alternative improvement strategies difficult to establish.

Though we highlighted the benefits of choosing KBEM as the foundation for measuring OE in the Portuguese Local Government, there are certainly some drawbacks. For example, if compared to the EFQM/BEM, KBEM is less well-known and consequently, at first, it may not be so appealing to the Portuguese municipalities. Furthermore, KBEM was never applied to the Public Sector context before and, thus, there is no previous evidence that it properly represents the determinants of OE for the Local Government.

In the next chapter, we examine the application of TQM principles and concepts in the Public Sector, in general, and in the Local Government, in particular. Given the lack of empirical studies in this area, and the limitations of existent public service quality frameworks, the importance of developing a model to measure OE in the Local Government is demonstrated.

The results of the application of KBEM in the Portuguese municipalities are reported in Chapter 6, where each of its principles and concepts is interpreted according to the language, values and goals of the Local Government.

CHAPTER 3. TOTAL QUALITY MANAGEMENT IN THE LOCAL GOVERNMENT:

Concepts, Challenges and Models for Implementation

If we accept that the principles underlying Total Quality Management (TQM) and Organisational Excellence (OE) are universal (Kanji, 2002), there is no reason to believe that they do not apply to the Public Sector in general and to the Local Government in particular. The existence of common quality award frameworks for the manufacturing and the service sector and for private, public and voluntary organisations (with just slightly different guidelines) further corroborates this view. Nevertheless, completely discarding the existence of contingency variables would be unwise. Even if the principles are universally valid, their interpretation and implementation must take into account the specific characteristics of the organisation and of its environment, as suggested, among others, by Dean and Bowen (1994), Moreno-Luzón and Peris (1998), Morgan and Murgatroyd (1994).

Local Government institutions have an organisational structure, design, and working practices that strongly reflect their bureaucratic legacy. Additionally, they face a complex environment, dominated by social and political factors. This scenario requires TQM principles and core concepts to be carefully interpreted.

The study of TQM and OE in the Local Government is particularly interesting, given the wide range of services local authorities provide, the political dimension they necessarily incorporate, and their visibility and impact on the communities they serve. Consequently, the complexity of TQM implementation is significant, but so are the potential rewards of OE for politicians, local government officers, and, most of all, citizens, who often accumulate the roles of taxpayers, customers and electors.

Because they enjoy a relative degree of autonomy and independency (especially if compared to Central Government agencies), local authorities are often pioneers in introducing new methods of administration (Gaster 1996; Gabris *et al.*, 2000; Skelcher, 1992a). They are closer to the citizens than any other level of Public Administration and therefore tend to be more responsive and innovative.

According to this general tendency, in Portugal municipalities are, within the Administrative Public Sector, forerunners in the adoption of new management practices,

including TQM. This fact is confirmed by the examples given by municipalities that were officially recognised, in the scope of the Portuguese System for Quality in the Public Services, for their quality achievements, and by the large proportion of institutions implementing (or prepared to implement) TQM approaches, as our exploratory study (see chapter 4) demonstrates.

This chapter aims to contribute to a deeper understanding of the meanings of TQM and OE in the Local Government, giving some insights into how their principles and core concepts can be applied in practice. It also gives preliminary justifications for the adjustments to be made in KBEM so that it can be applied to measure OE in the Portuguese municipalities.

3.1. UNDERSTANDING OF QUALITY IN THE PUBLIC SECTOR

Over the last decades, Public Services Quality became a politically fashionable issue, being part of the agendas of most Governments around Europe.

Defining Quality in the Public Sector is more complex than it is the Private Sector, where much of the quality language was originated. The concept has been associated with a wide range of expressions:

- 'value for money', especially in the UK where the expression became very popular in the 1990s. 'Value for money' suggests the idea of accountability (Dahlgaard *et al.*, 1998; Kirkpatrick and Lucio, 1995a) and highlights the importance of getting the best standards of public service delivery for the money taxpayers pay;
- 'put the customers first', emphasising the need to think of service users in terms of customers who have a voice and need to be involved in the definition of what is to be provided, when, how, and by whom (Skelcher, 1992a). In this perspective, Quality equals customer satisfaction;
- 'public service orientation', which combines the rights of individual consumers to high-quality services with those of citizens to be empowered and involved in the management and planning of public services (Kirkpatrick and Lucio, 1995b).

The main reservations about the applicability of TQM to the Public Sector come from the so-called argument of "public sector excepcionalism" (Kaboolian, 2000). As argued in the

Introduction, we acknowledge the uniqueness of some public sector values and its distinct political environment, but we also think that, at the operational level, public and private organisations are much more similar. The importance of taking into consideration public sector values in the measurement of OE is further discussed in Chapter 7, within the leadership model presented. The focus here is on the nature of the services provided and on the distinct characteristics of some of its stakeholders.

Looking at the Public Sector it is possible to find (Gaster, 1995):

- services that are provided to everyone – universal services, such as street lighting;
- services that are only available to those deemed eligible (that is the case of most welfare benefits);
- services that are imposed through legislation and from which no-one can be excluded (such as defence and maintenance of public order);
- services that are demand-led (for example, primary health care);
- services that are rationed by resource availability (most forms of social care. for example);
- services that are preventive (community development), and finally
- services that are available for all to use as they wish, usually for a charge (leisure services, transports, etc.).

It follows that, although most Public Sector customers are voluntary, some individuals have no choice but to receive some public services (Skelcher, 1992b). Additionally, many public services are paid collectively through the tax system rather than directly financed by the individual consumer. It must be noticed that even when fees and charges exist, they may have different purposes (Skelcher, 1992a). Often they represent financial contributions towards a service (on a full-cost basis or not), but they can also constitute penalties or be imposed to limit demand (for example, pricing on parking meters in the city centre).

Nevertheless, as Morgan and Murgatroyd (1994) argue, the absence of a market for many public services (at least in classic terms) or the existence of some atypical customers should not prevent public sector organisations from fighting inefficiency and waste.

In this sense, the possible benefits of TQM are equally valid in the Public Sector. Although, if TQM is to be successfully implemented, some problems associated with the quality terminology have to be discussed first.

Difficulties probably begin with the definition of 'need' (Sanderson, 1992), which public organisations usually connect to allegedly objective criteria, by reference to professional, bureaucratic or legal standards (Skelcher, 1992a). This normative meaning may well differ from that of 'felt' needs (Skelcher, 1992a) which are at the core of service quality in the private sector.

Chapter 1 presented some alternative definitions of Quality, which, as a rule, are also applicable to the Public Sector.

Defining Quality in terms of conformance has the main advantage of providing public services with explicit standards, which tell customers and citizens what they have right to expect and give specific basis for complain and redress. Moreover, standards provide benchmarks for assessment and review (Gaster, 1995). These benefits explain the tendency, also observable in Portugal, of introducing charters in the Public Sector.

However, the process of establishing standards is complex (Gaster, 1995). First of all, standards need to be credible to be accepted. Moreover, they cannot be simply imposed. Those who are actually involved in service production and delivery need to be involved. Standards are often criticised because they frequently are defined centrally with little regard to local circumstances. As discussed in Chapter 9, this last aspect explains why performance frameworks imposed from the outside and relying on "blind comparisons" – typically the case of the so-called "league tables" – face such a high resistance.

In the Local Government, "quality" is not a new concept but, in the past, was associated with only partial (and not integrated) perspectives. Expressions such as "quality professionals", "quality of care", or "quality of representation" were quite usual (Wilkinson *et al.*, 1998, pp. 88-89), but little was known about Total Quality Management.

A number of features explain the distinctiveness of local authorities, namely (Appleby and Clark, 1997; Buxton, 1998; Donelly *et al.*, 1995; Leach *et al.*, 1994; Skelcher, 1992a; Younis *et al.*, 1996):

- Political nature of Local Government (elected members exercise substantive powers and are subject to public accountability for those powers);
- Diversity of the services provided and multiplicity of goals pursued (including broad societal aims);
- Service customers profile;
- Distinct legal environment and strong statutory constraints;
- Singular value-basis (in which concerns with equity and democracy are typically included); and
- Geographical domain – local authority activities are usually confined to a particular geographical area.

With reference to the Local Government, in the UK, the Audit Commission (1988, quoted in Sanderson, 1992) defines Quality mainly as "meeting customer requirements". However, this definition poses some problems. As Sanderson (1992, p. 22-23) puts it, "if quality is defined solely in terms of customers wants and expectations, it will fail to address the extent to which the wider needs of communities are met". This means that some public values, such as equality and equity, can be at stake if this definition is not dealt with care (see section 7.3 for further details).

In general, it can be said that local authorities customers want to be treated as individuals and receive a service package that closely meets their particular requirements (Skelcher, 1992b). However, as citizens, they know that this has to be balanced with the need to provide an equitable and fair service.

On the whole, the Public Sector scenario makes it more difficult to implement principles such as responsiveness and customisation and reinforces the importance of carefully interpreting some TQM concepts in the Local Government.

With this purposes, next section discusses the notions of 'customer', 'client' and 'citizen' of a local authority.

3.2. THE ROLES OF CITIZENS, CUSTOMERS AND CONSUMERS

TQM consistently emphasises customer service and customer satisfaction as key dimensions.

Identifying and characterising the customers of a local authority is not a simple task. As mentioned before, some difficulties are due to the varied nature of the services provided. In the local authorities' case (Skelcher, 1992a):

- some services are free at the point of delivery (for example, maintenance of public gardens, footpaths, kindergartens);
- some services are charged (such as building licenses, parking);
- access to some services is rationed (for example, housing); and
- it is impossible to restrict an individual's use of or benefit from some other services (such as street lightening).

Moreover, Local Government customers are not only the recipients of the services provided, but also citizens who have the ability to influence the policy of the local authority through political mechanisms. In addition, their role as taxpayers further complicates their position as stakeholders.

As Ingraham (1995) stresses, each of these roles implies a different value perspective from which public services are evaluated. Responsiveness, for example, will be essentially valued from the recipients' perspective while taxpayers will make their judgements fundamentally based on productivity and efficiency.

It may also be argued that in the public services, the customer (at least the individual customer) cannot be always right (Elcock, 1996). The Public Sector has social and collective purposes that may go beyond (and eventually be in opposition with) individual preferences.

Citizens vs. Customers

There is an extensive and interesting debate concerning the existence of customers in the Public Sector and whether the 'customer' concept enlarges or reduces the one of 'citizenship' (Ingraham, 1995; Kingdom, 1996).

Skelcher (1992a) argues that citizenship confers a series of entitlements:

- to be aware of the main policies and decisions of the local authority;
- to be able to debate and discuss issues that the council is considering;
- to have the interests and concerns weighted by the council;
- to participate in the governance of the local community;
- to judge the work of the council; and
- to vote.

Ingraham (1995) considers that the 'citizen' concept has a collective dimension, whereas the notion of 'customer' is much more atomistic.

In Kingdom's (1996) view, initiatives such as the Citizen Charter rather than enhancing citizenship actually undermine it. The argument is that the Citizen Charter is a document conferring powers, rights, duties and privileges to the atomised, individual shopper, rather than to the citizen as a member of a community. In addition, the relationship between the public service supplier and the customer becomes regulated, and, according to this perspective, restricted by a contract (Elcock, 1996). Chandler (1996) further argues that effective democracy cannot be based on a simple market-based contractual formula.

An alternative and more compromising point of view is that of considering that "citizenship sets the context within which the customer/provider relationship takes place" (Skelcher, 1992a, p. 73). In this perspective, customers do not replace citizens. Both coexist and, in our opinion, the development of active and close relationships between the local authority and its customers, as TQM advocates, can in fact enhance local democracy.

Figure 3.1. Forms of relationship between customers and local authority

(Skelcher, 1992a, p. 28)

As Figure 3.1 illustrates, deepest forms of interaction require citizens empowerment and increasing participation in the decision making process. In this sense, TQM can, in our view, contribute to operationalise some of the entitlements of citizenship.

Customers vs. Consumers

There is an increasing tendency to refer to the service recipients and potential users of public services as customers.

Some public sector customers are similar to those in the private sector paying directly or indirectly for the services provided and received. Others are the recipients of services, sometimes compelled, but make little or no financial contribution towards their provision. Finally, some customers pay for public services that they cannot use because they not meet certain criteria (Donelly *et al.*, 1995).

Therefore, it must be acknowledged that within the Public Sector it is difficult to establish who the customer is by reference to a basic contractual market-based relationship (Chandler, 1996). As described earlier, some services are peculiar and cannot be explained in terms of simple supply/demand mechanisms. For example, there are collective goods (such as clean air), where the State intervenes to secure a collective benefit; situations where supply is rationed through a system other than the price; and also services where the State is the unique provider.

The possibility of exercising market choice is what, according to some researchers, distinguishes customers from consumers (Elcock, 1996).

In the traditional sense, the power of choice is limited for users of several Local Government services, since local authorities are often the unique providers within the corresponding geographic area. In Portugal, that is the case of services such as water supply, sewage and refuse collection. In other areas, such as public transportation, alternative providers can frequently be found.

It is important to notice that other mechanisms exist in the Local Government for customers to exercise power and control, especially political accountability through the electoral process. However, on a daily basis this ultimate mechanism is of limited value. We believe, as discussed in Chapter 8, that the regular involvement and participation of citizens in Local Government activities and processes is the best instrument to ensure that it stays accountable and responsive to their needs and demands. In any case, with the introduction of the 'customer' concept in the Public Sector, political accountability is

increasingly being complemented by direct accountability to the users of public services (Younis *et al.*, 1996).

Some authors (Elcock, 1996; Hunt, 1996) argue that the notion of 'consumer' is more embracing than that of 'customer', in the sense that customers only act through market mechanism, whilst consumers may participate in collective decisions about service provision. However, this argument can be contested. The concept of customer associated with the quality management theory is, in our view, sufficiently broad to reconcile these opposed standpoints.

Internal customers

TQM regards employees as customers whose needs must be taken into account and satisfaction measured on a continual basis.

In the UK, the contracting culture that emerged in the 1980s made local authorities aware of internal relationships between client departments and direct service organisations (Skelcher, 1992a).

In Portugal, this contracting tendency was much more attenuated and, therefore, these notions less familiar. If, in some instances, the term 'customer' is not yet fully accepted and used, seeing Local Government staff as 'internal customers' is, according to the results of our exploratory survey (see Chapter 4) even more unusual.

Because the use of the word 'customer' still raises some concerns and misunderstanding among Portuguese municipalities, it was replaced in the questionnaires used in this research by the term 'citizen' or 'service user', except when it was felt it was absolutely necessary to directly confront municipalities with the 'customer' concept.

3.3. THE POLITICAL DIMENSION OF TQM IN THE LOCAL GOVERNMENT

Public organisations exist in order to achieve public purposes defined collectively by political processes (Kaboolian, 2000). Therefore, the debate over the nature of public service quality is a debate over the values of the public sector (Wilkinson *et al*, 1998).

For the Local Government, this reasoning is particularly applicable. In fact, the political dimension of Local Government institutions is at the core of their missions and constitutes an essential element of democracy.

Therefore, the introduction of any major change, such as the implementation of TQM, cannot ignore the role of political values, local parties, and other political groups (Wilkinson *et al.*, 1998). Different views about the nature of Government necessarily have an impact on the emphasis given to different TQM approaches and concepts. Consequently, TQM in the Local Government must take into account the mediated effects of political variables and processes.

Local authorities are recommended to follow TQM approaches that are compatible with their missions, roles and particular circumstances of the environments in which they operate (Sanderson, 1992).

To be successful, TQM needs to have the overall support of the political leadership of the municipality. The presence of a high degree of conflict among elected members may become dysfunctional and, by undermining trust, dramatically reduces the capacity of managers and staff to implement reforms (Gabris *et al.*, 2000).

Community government, which "aims to assist groups and individuals to identify their common interests and take a more active part in shape the decisions that affect them" (Skelcher, 1992a, p. 79), is achieved through citizenship (Stewart, 1995).

Implementing TQM requires municipalities to change their balance of power in favour of citizens and of those who use and experience the services they provide. In this sense, TQM can foster local democracy by encouraging citizens' empowerment and contributing to overcome the prevalent view that the political process is almost impenetrable. On their turn, empowerment and active participation force local authorities to be more responsive to citizens' needs and demands.

TQM in the Local Government must recognise that customers are also citizens with a legitimate interest in and a right to influence decision-making. As Gaster (1996) notes, "(q)uality policies can bring local government and the people it serves close together through a focus on consumers and citizens".

Similarly, some political reforms facilitate TQM implementation. This is typically the case, for example, of decentralisation, which, according to Skelcher (1992a) offers opportunities for:

- elected members to interact more with customers and citizens;
- resource allocation and service policy decisions to be increasingly more sensitive to local needs; and
- better citizens' access to political processes and decision making forums.

By emphasising the importance of political values, promoting the participation of citizens and other stakeholders, and stressing the criticality of political and managerial leadership, TQM, we believe, can reflect and enhance the democratic basis of Local Government.

We will return to these issues in Chapter 7, where the Leadership roles in establishing and communicating the organisational values, defining the mission and gaining stakeholders support for pursuing the vision are discussed.

3.4. DRIVING FORCES FOR TQM IMPLEMENTATION

Several pressures explain the Public Sector interest in introducing TQM (Gaster, 1995; Kaboolian, 2000; Loomba and Spencer, 1997; Moon and Swaffin-Smith, 1998; Morgan and Murgatroyd, 1994; Redman *et al.*, 1995; Sanderson, 1994; Smith, 1993).

With reference to the Local Government, the literature identifies several elements that have been contributing to raise TQM awareness among local authorities. Appleby and Clark (1997) summarise those forces as follows:

- the rise of customer expectations;
- constraints on spending, which force local authorities to focus on value-for-money and encourage them constantly to improve the efficiency of their operations;

- governmental policies – modernisation programmes, decentralisation efforts, etc; and
- the politicization of Quality, with all the major political parties promoting Quality in the Public Services.

Legislation changes, especially those that increase customer choice, also play an important role (Redman *et al*, 1995). In fact, new legislation has often introduced in the Local Government some kind of competition between service providers, the ultimate example being the CCT regime in the UK. In other instances, the aim of the new legal frameworks is to promote customers' and citizens' involvement in the processes of planning and delivering public services. Citizens Charters are possible examples of this type of initiatives.

As our exploratory study reveals (see Chapter 4), there are other possible motivations to adopt TQM in the Local Government, including the desire to improve local officers productivity (Berman and West, 1995) and staff demands for greater autonomy and increasing participation in management decisions (Moon and Swaffin-Smith, 1998).

It is possible to argue that conflict sometimes exists between TQM driving forces. The most typical example is the contradiction that often arises between reducing spending (cutting-costs) and improving the quality of the services provided. TQM clearly requires large investments that are difficult to be made with shrinking resources. Additionally, competition for scare resources usually creates fears about performance assessment, openness and transparency, thus jeopardising the pillars of TQM.

The appeal of TQM for Local Government organisations is, nevertheless, strong and offers the promise of solving some of these tensions, at least in the medium-term. Similarly to what has been experienced in the private sector, TQM can lower operational costs, improve public services, and increase employee morale (Dean and Helms, 1996). The same view is shared by other researchers (Kaboolian, 2000; Redman *et al.*, 1995) who argue that TQM potentially leads to more satisfied customers and citizens, more challenging and self-rewarding jobs, less waste and increased economy and efficiency. Overall, TQM is perceived by the Governments of many different countries as indispensable for the modernisation processes that will make Public Administrations more effective and fiscally responsive (Hyde, 1992).

3.5. BARRIERS FOR TQM IMPLEMENTATION

The relative late arrival of TQM principles and concepts to the Public Sector is usually attributed to the inexistence, especially until the reforms carried out in the 1980s and 1990s (see Chapter 1), of strong external agents for improvement, with a particular emphasis to competition.

Obstacles to TQM implementation in any context include (Allen and Kilman, 2001; Loomba and Spencer, 1997; Salegna and Fazel, 2000):

- Lack of a company-wide definition of Quality;
- Lack of a formalised strategic plan for change;
- Lack of a customer focus;
- Poor inter-organisational communication;
- Lack of real employee empowerment;
- Lack of employee trust in senior management;
- Inappropriateness of the rewards system;
- View of quality as a quick fix program;
- Lack of holistic approaches to TQM;
- Focus on short-term financial results;
- Lack of time to dedicate to quality initiatives; and
- Lack of leadership.

Giving quality initiatives time to produce results is a major issue for successful TQM implementation. Rather than a quick fix for organisational problems, TQM needs to be regarded as a comprehensive and long-term management strategy, be allocated with sufficient resources and, above all, receive clear and visible commitment from top managers (Grant *et al.*, 1994; Gunesakaran *et al.*, 1998).

It is predictable that most of these barriers are equally valid for the Public Sector context. Several studies (Chen and Sawyers, 1994; Dewhurst *et al.*, 1999; Hyde, 1992; Madsen, 1995; Radin and Coffee, 1993; Smith, 1993; Swiss, 1992) have confirmed the existence of such barriers and identified some others that are particularly relevant to public organisations. A possible list of such obstacles would include:

- Political power and group influences;

- High environment uncertainty;
- Difficulty in assuming a long-term commitment to TQM;
- Multiple accountability mechanisms;
- 'Sectorialism' and departmentalisation;
- Lack of comprehensive management education;
- Irregular top management support;
- Lack of customer orientation;
- Excessive emphasis on inputs (in detriment of processes and outcomes);
- Need to ensure compliance with strict rules and regulations;
- Lack of clarity in the performance measurement systems;
- Lack of internal drive and motivation to improve processes and raise productivity; and
- Scarce resources for the required investments.

With special reference to the Local Government, potential problems for TQM implementation comprise (Appleby and Clark, 1997; Skelcher, 1992a):

- Unfamiliarity with market research methodologies and public opinion studies as tools to evaluate service quality and gather customers' views;
- Accessibility deficiencies – services tend to be centralised, with unsatisfactory operating hours and an uncomfortable and intimidating environment in waiting areas;
- The provision of information to external parties is usually complex and detailed, written from the perspective of bureaucratic defensiveness rather than with the aim of assisting customers;
- Measurement of performance dominated by indicators that do not reflect customer concerns;
- Dominance of public managers who are experts in their professional area but do not have an integral view of the local authority;
- Tradition of following rules, not listening to customers; and
- Strong internal divisions between functional areas (tradition of departmentalism and dominance of professionalism).

As a consequence of these adversities, quality initiatives in local authorities are often fragmented and the result of individual efforts, as opposed to consequences of a strong and deliberate organisational strategy. Without a complete and truthful organisational

commitment, these initiatives are unlikely to prevail and individuals who were leading these efforts will soon become disappointed and unmotivated.

The lack of strategic planning and of a long-time vision is a major impediment for successful TQM implementation. As Skelcher (1992a, p. 114) stresses, "a strategy for quality is essential as a means for implementing corporate intentions and supporting individual initiative".

This is clearly not a problem unique to the Public Sector. However, it seems to be particularly pertinent in the Local Government context, where political factors add to the complexity of purposes and to the diversity of stakeholders' pressures. As Morgan and Murgatroyd (1994, p. 178) argue, "(t)he short-term focus of most government initiatives is a function of their time in the office". While TQM requires a long-term vision, one-year budget cycles further contribute to this short-term perspective (Chen and Sawyers, 1994; Radin and Coffee, 1993).

Quality objectives need to be integrated in the overall strategy of the local authority. In this sense, quality concerns and values should be part of the political agenda and translated, by the managerial leadership with the participation of all organisational members, into concrete and measurable objectives.

Strong departmentalisation, which is a characteristic of bureaucratic structures, is a key barrier to inter-functional cooperation, as advocated by TQM.

In the Local Government, departmentalisation is often associated with the power of certain groups or professions within the organisation. The ethos of professionalism is frequently referred to as a main barrier for TQM implementation in local authorities (Morgan and Murgatroyd, 1994; Wilkinson *et al.*, 1998). In the Portuguese Local Government, we believe this issue does not assume such a prominent role, since loyalties to specific occupational groups and professional cultures do not seem to be very strong. Not only, as shown in Chapter 1, Local Government in Portugal employees a relatively low-qualified workforce, but also areas typically associated with this ethos of professionalism (such as education or healthcare) are still a small part of its activities.

Furthermore, poorly connected agency cultures and a strong tradition of isolation pose difficulties to networking in the Public Sector (Luthy, 2000).

Empowerment is another idea of difficult implementation in the Local Government. It means transferring part of the control from the top management to the employees and this goes against the long tradition of centralisation prevalent in the Public Sector. As Hogett (1991, quoted in Reed, 1995, p.50) points out, what is at stake is a fundamental shift in the focus of control "from a concern for internal methods and procedures to a concern for results".

Empowerment assumes that a degree of operational autonomy can be exercised, with control becoming "both devolved and remote" (Reed, 1995, p. 50). This represents a significant challenge for public sector managers, who are often reluctant to "give up the situational power they have achieved by rising through the bureaucratic hierarchy of the organisation" (Morgan and Murgatroyd, 1994, p. 150).

Figure 3.2. Employees' empowerment and resistance to change

(Adapted from Pheng, 1998)

Pheng's (1998) model (see Figure 3.2.) emphasises that empowerment and employees' adaptability to change are strongly associated. A closer look at the forces that drive empowerment suggests a strong conflict with the traditional (bureaucratic) public sector culture, where the power conferred by the hierarchical position dominates and lines of communication are long and vertical. This also brings negative consequences in terms of information disclosure, regarded as essential for TQM implementation (Cameron and Barnett, 2001; Mehra *et al.*, 2001).

The role of reward systems in supporting TQM, as investigated by Allen and Kilman (2001), is particularly pertinent in the Public Sector, where rewards are traditionally tied to individual performance and almost exclusively based on productivity goals. Such systems

difficult the implementation of key TQM principles such as teamwork and customer focus. In fact, the effective use of teamwork demands a shift from individual- to group-oriented incentive systems (Hyde, 1992; Ingraham, 1995; Morgan and Murgatroyd, 1994; Mehra *et al.*, 2001), while customer focus calls for new performance measurement and appraisal criteria.

In the case of the Portuguese Local Government, leaders and top managers have little freedom to make changes in the reward system, because local government officers are public civil servants, who must be paid and progress on the career according to very strict rules, decided for the Public Administration as a whole and essentially based on seniority and academic qualifications. Even so, managers still have at their disposal a range of intrinsic rewards (not related to pay or compensation issues), which they can use to encourage appropriate behaviours. According to the results from our exploratory study (see Chapter 4) – which confirms the lack of other forms of motivation – municipalities in Portugal are, in effect, using no monetary forms of recognition, such as plaques, letters of appreciation, and praise, as means of rewarding relevant contributions to TQM.

Overall, the inexistence of an appropriate organisational culture is often mentioned as the major impediment to TQM success (Salegna and Fazel, 2000). Next section briefly addresses the issue in a Public Sector traditionally dominated by bureaucratic organisations.

3.6. PUBLIC SECTOR CULTURE: FROM A BUREAUCRATIC TO A QUALITY CULTURE

It is beyond the scope of this research to discuss in detail the concept of culture. A brief review of the debate around the definition of organisational culture reveals that it essentially deals with values and norms that give organisations identity and guide their members' behaviour. In accordance, Shein (1985, quoted in Cooke, 1992, p. 143) defines culture as "the deeper level of assumptions and beliefs that are shared by members of an organisation, that operate unconscientiously, and that define in a basic 'taken for granted fashion' an organisation's view of itself and its environment". Culture is further communicated and reinforced by the organisation's structure, systems and procedures,

stories and legends, formal statements of philosophy and policy, and the physical environment (Dale *et al.*, 1997).

Parker and Bradley (2000) call attention to the fact that many changes taking place in the Public Sector are introduced overlooking cultural aspects, which, as the authors emphasise, are central to the success of any process of change.

As discussed in the Introduction, the traditional model of Public Administration exhibits the following characteristics (Weber, 1964): emphasis on norms and written procedures; authority based on formal discipline; neutrality; work specialisation; pronounced hierarchies; and clear system of careers and remuneration. This description corresponds to what Parker and Bradley (2000) designate as the "hierarchical culture" model, which, given its reliance on formal structures and procedures and its emphasis on stability, predictability and standardisation, is increasingly regarded as inflexible and unable to cope with rapidly changing environments.

Public sector bureaucracies are further strengthen by principles of "equal treatment under the law", norms of democratic control, and reporting requirements (Nielsen and Høst, 2000).

Over commitment to rules and regulations makes public sector bureaucracies very resistant to change (Morgan and Murgatroyd, 1994) and excessively inward-looking (Ingraham, 1995). As Jones (1999) points out, bureaucratic and hierarchical structures easily become self-serving, non-responsive and ineffective, with little regard to what happens around them.

This does not mean, however, that the bureaucratic model has no strengths. In fact, even from a TQM point of view, it offers some contributes, by encouraging roles, responsibility and accountability to be clearly defined, work processes to be mapped and analysed, and, outputs consistency, standardisation and conformity to be pursued (Crooke, 1992).

The problem is that it also promotes a culture characterised by high centralisation and formalisation, where precise specifications and authority based on job descriptions dominate. Accordingly, public bureaucracies are associated with impersonal attitudes of public officials (Sanderson, 1994) and heavily dependent on hierarchical controls. Because functions are separated rather than integrated, conventional bureaucracies make individuals

pursue subunits- and self-interests with little regard to interdependencies (Durant and Wilson, 1993).

It is obvious that this type of culture does not fit well into many TQM principles and practices.

TQM takes organisations into "a new landscape where authority, decisions, and innovation are much more widely shared" (Grant *et al.*, 1994) and that is clearly against the fundamentals of bureaucracy. In fact, quality management directly challenges "the dominance of the bureaucratic culture and provider power" (Reed, 1995, p. 57), and advocates devolution of both power and authority to frontline workers (Ingraham, 1995). The involvement of all members in information gathering, problem identification and decision-making, as TQM proposes, is a dramatic departure from the traditional patterns of hierarchical communication, specialisation and departmentalisation.

TQM principles need to be aligned with the organisational culture (Dean and Helms, 1996; Gaster, 1995; Loomba and Spencer, 1997; Moon and Swaffin-Smith, 1998; Salegna and Fazel, 2000).

As Sureshchandar *et al.* (2001) highlight, a strong (quality) culture is deeply associated with the existence of a common vision that encourages people from different functions to work together towards collective goals. A culture that effectively supports TQM mainly involves the existence of shared values and beliefs, trust and mutual respect, empowered employees and an attitude that favours continuous improvement and risk-taking, based on open and honest communication (Salegan and Fazel, 2000).

Cultural change is often mentioned in the literature as an important aspect of TQM implementation. However, changes in the organisational culture are very complex and must be dealt with extremely caution (Dale *et al.*, 1997; Durant and Wilson, 1993). As a significant body of literature highlights, culture is part of an organisation identity, and, therefore, is deeply rooted in its norms and values. Changes at this level, can easily cause feelings of threat and fear.

Dale *et al.* (1997) enunciate several mechanisms for cultural change:

- what leaders pay attention to;

- how leaders react to crises and critical incidents;
- role modelling and teaching by leaders;
- criteria for allocating rewards and determining status; and
- criteria for selection, promotion, and termination.

In synthesis, TQM requires a change in the culture prevalent in the Public Sector that is complex and unlikely to happen without the permanent, consistent and visible engagement of political leaders and managers.

3.7. CURRENT MODELS FOR QUALITY MANAGEMENT IN THE PUBLIC SECTOR

Little research and few solid theories exist on how to achieve OE in public management. Attention is usually focused on overall political and structural reforms rather than on the management approaches required for success within individual units of public service (Ingstrup and Crookall, 1998).

Several approaches exist for the implementation of quality management in the Public Sector.

The establishment of quality standards, as mentioned in Chapter 1, is a way many governments found to promote quality in the public sector and held public organisations accountable to achieve certain levels of service. As Kirkpatrick and Lucio (1995b) emphasise, by following such approach public services are forced to conform to technical specifications and, at the same time, to ensure that resources are used as efficiently as possible to meet those standards.

A path chosen by some public organisation is the implementation of Quality Assurance programmes, mainly with reference to the ISO 9000 series.

As stressed earlier, various public sector organisations have also adopted quality award-based models to guide their improvement efforts. With respect to these frameworks (briefly analysed in the previous chapter), it is worthwhile to remind that, while the MBNQA does not comprise public institutions applicants, the EFQM/BEM has since 1996 a specific award category dedicated to public sector institutions. In the US, there are,

nevertheless, several awards at the Federal and Local Government levels, inspired in the general MBNQA framework, which distinguish outstanding public sector organisations. Yet, even when within those quality award-based frameworks specific guidelines for the Public Sector exist (as it happens in the European Award case) adjustments and adaptations are limited to minimal changes in the terminology used.

The lack of more detailed indications on how to implement TQM in Public Administrations led to the publication by the European Union in 2000 of the so-called Common Assessment Framework (CAF, 2000) which proposes to:

- serve as an introductory tool for public administrations who want to improve their managerial skills and conduct self-assessment according to a set of TQM principles;
- provide a basis to compare and integrate various quality management models and methodologies that have been used in the various EU countries;
- to encourage benchmarking between public sector organisations across Europe.

The CAF incorporates the main features of both the EFQM/BEM and the Speyer model. It intends to be a simplified version of the EQA approach, covering exactly the same criteria and pointing out the main issues which should be considered within each of these areas. Probably, the main contribution of the framework comes from the interpretations done for each criterion, specifically explaining what public organisations are expected to do for implementing it and providing examples of possible indicators of constructive action.

However, suffering from the same measurement deficiencies pointed to the quality award-based models (see section 2.4.1), the CAF does not constitute by itself a suitable model to objectively analyse the drivers of OE in the Public Sector.

In the private sector, considerable research has been carried out in the way service quality can be assessed and measured. For the reasons explained before (namely the existence of multiple stakeholders, conflicting goals and complex lines of accountability), the Public Sector poses additional problems to this assessment.

Yet, important attempts have also been made to define and measure Public Service Quality, most of them using and/or adjusting models developed in the private sector context.

Among these, probably the most popular is the Parasuraman- Zeithaml-Berry model (or the SERVQUAL model), which was described in section 2.2. Examples of its application in the Public Sector have been reported in the literature (Curry and Herbert, 1998; Wisniewski and Donelly, 1996).

However, since in this research our aim is not to measure the quality of a particular product or service, but rather to identify and validate the determinants of OE as whole (i.e. at the organisational level), models such as the SERVQUAL, which unit of analysis is the service provided, are not adequate.

Other researchers have attempted to identify the CSFs for OE in the Public Sector, but often did not validate them empirically or integrate them in a conceptual model.

Five attributes characterise well-performing public organisations, namely (Ingstrup and Crookall, 1998):

- Emphasis on People - who are challenged, encouraged, developed and given the power to act and to use their judgement;
- Participative Leadership - leaders envision an ideal organisation, define its purpose and goals, and use them to foster commitment. Collaboration, at all the stages and levels, is valued and encouraged;
- Innovative Working Styles - staff learns from actions and mistakes, and looks for creative solutions to the problems;
- Strong Client Orientation; and
- A mindset that seeks optimum performance (i.e. Excellence).

Similarly, public agencies need to (Ingstrup and Crookall, 1998):

- demonstrate their commitment to values;
- serve the public;
- have an empowered staff;
- develop shared leadership; and
- show dedication to public service.

Based on public sector managers' experiences in different places of the world, Ingstrup and Crookall (1998) identified nine common features associated with superior performance –

mission; leadership; accountability; people; communication; trust; management tools; teamwork; and change management. Those characteristics, which need to be simultaneously addressed, were then aggregated into three (mutually reinforced) pillars that the authors believe support success in well-performing agencies (Ingstrup and Crookall, 1998):

- Aim – top public agencies know clearly the direction they are headed in;
- Character – they have a strong sense of who they are and what is important. That organisational character is communicated internally and externally. There is a high degree of trust and a desire to learn; and
- Execution – these organisations get things done, achieving their aim and demonstrating their character through the use of a broad array of management tools. They innovate and realise the value of working in teams.

The Federal Quality Institute in the US (Hyde, 1992; Lin and Ogunyemi, 1996) enunciated, in 1991, seven operating principles to implement Quality in the Public Sector:

- top management support and personal leadership;
- long-term strategic planning for the implementation of TQM throughout the organisation;
- customer focus;
- measurement and analysis of products and processes so that progress can be monitored and improvement opportunities identified;
- employee training and recognition;
- empowerment and teamwork; and
- quality assurance.

Morgan and Murgatroyd (1994) summarise, as follows, what they regard are the core constructs of TQM across Government:

- Vision and strategy;
- Policy deployment (ensuring that vision and strategy are translated into outcome-focused plans);
- Measurable goals;
- Quality structure and support (quality efforts need to be managed and coordinated);

- Empowered teams;
- Data-based decision making;
- Managerial commitment and communication;
- Rewards and recognition system alignment;
- Stakeholder focus; and
- Training.

Smith (1993) describes the elements that must be managed simultaneously in an effective TQM effort (see Figure 3.3).

Figure 3.3. Elements of TQM in the Public Sector

(Smith, 1993)

As the figure above shows, an adequate service strategy requires understanding the environment and knowing what customers want and expect. Additionally, people and systems must be aligned to support the service strategy. The links between these elements are however not clear. Moreover, analysing people and systems as separate constructs, in our opinion, can be conceptually criticised. Finally, Smith's (1993) approach does not explicitly address the Public Sector context and how it impacts each component of the model.

Based on the TQM dimensions that have been consistently proposed in the literature (see Chapter 2), Dewhurst *et al.* (1999) selected ten TQM elements and analysed their relevance for public sector organisations. The dimensions chosen were:

- top management support;
- customer relationship;
- supplier relationship;

- workforce management;
- employee attitudes and behaviour;
- product and/or service design process;
- process flow management;
- quality data and reporting;
- role of the quality department; and
- benchmarking.

Nevertheless, the authors did not empirically test the significance of these dimensions; neither did they propose any relationships between them.

Among the limited literature available on Quality in the Portuguese Public Sector, Gonçalves and Monteiro (1999) list the following critical success factors:

- total leadership support and commitment;
- definition of vision, strategy and goals;
- results assessment and monitoring of progress;
- focus on process improvement;
- emphasis on the issues that have a major impact on customer/citizen satisfaction;
- clearly defined responsibilities;
- regular, open and transparent communication; and
- education and training focused on the organisation' needs and objectives.

Nevertheless, no attempt was made to integrate them in any conceptual framework.

With reference to Quality in the Public Sector, one of the few existent models was proposed by Gaster (1995). Her model (see Figure 3.4) puts the stakeholders at the core of policy development in the Public Sector and emphasises the importance of establishing organisational values in line with quality management principles. It also highlights the need to create a continuous improvement cycle – defining goals, measuring and monitoring them, establishing improvement programmes and setting new and more demanding goals.

Figure 3.4. A model for service quality

(Gaster, 1995, p. 6)

The model has two main advantages: to clarify the relationships between different parts of the policy process; and to stress that performance measurement must take into consideration the values and objectives of the public organisation. Although, as the complexity of the framework illustrates, Gaster's (1995) model has a reduced explanatory power and involves too many factors, making its use as a prescriptive tool difficult. Furthermore, it assumes a degree of rationality in policy implementation that in reality is rarely possible.

The UK's Audit Commission (1993, quoted in Younis *et al.*, 1996) developed a framework that can be used by Public Sector organisations as a "quality map" to evaluate quality

initiatives. The map (see Figure 3.5) comprises four elements of quality - communication, specification, delivery, and people and systems - and stresses that simultaneous attention to (and balance between) these elements is needed to implement Quality in the Public Sector.

Figure 3.5. The quality map

(Audit Commission, 1993, in Younis *et al.*, 1996, p.376)

3.8. CURRENT MODELS FOR QUALITY MANAGEMENT IN THE LOCAL GOVERNMENT

Measuring TQM and OE in the Local Government is difficult, especially due to the strong provider/customer interaction required in most services and the indirect impact of many of its social policies (Sanderson, 1992). Given the multiplicity of purposes, such measurement has necessarily to involve the perspectives of various stakeholders. In Chapter 9 we present a performance measurement system which, by integrating KBEM and KBS, intends to give a contribution in this regard.

Stewart and Walsh (1989) suggest that Quality in the Local Government should simultaneously reflect the extent to which it satisfies individual users' requirements and

meets public proposes. To assess Quality, the authors identified three dimensions: the core service, the service surroundings, and the service relationship. Stewart and Walsh's (1989) framework encompasses technical and non-technical attributes, as well as accessibility and equity concerns.

Skelcher (1992a) adds to Stewart and Walsh's framework a fourth dimension – power – that he considers to be of particular relevance for judging quality in the Local Government. Service characteristics (comprising aspects such as availability, reliability, information, and performance), personal relationships (essentially involving courtesy, responsiveness, competence and communication), the physical environment (including appearance, access and functioning) and customer power (mainly related to rights and choice) are the four elements used to evaluate the service package according to the author.

For the UK, the Audit Commission (1988, quoted in Sanderson, 1992) suggests that "well-managed" local authorities are the ones that:

- understand customer needs;
- respond to electorate expectations;
- set and pursue consistent and achievable objectives;
- assign clear management responsibilities;
- train and motivate people;
- communicate effectively;
- monitor results; and
- adapt to change.

Within the Local Government context, several TQM implementation cases are reported in the literature (Clark and Appleby, 1997; Durant and Wilson, 1993; Jones, 1998; West *et al.*, 1993). Pioneering applications of TQM in Local Government include initiatives carried out in police departments, fire services, waste management, personnel management, transportation, public works, parks and utilities, but TQM can be virtually applied to any area of activity.

A review of these cases reveals that there are substantial differences in relation to key players, political foundation and values, rhythm and scale of implementation, approaches followed and results achieved.

According to Clark and Appleby (1997), to be successful, the implementation of TQM in the Local Government needs to:

- be sensitive to the culture and values of the local authority;
- engender support form across the authority;
- be reinforced by mechanisms for effective change and coordination.

Several local authorities decided to adhere to the certification movement and some of those currently are ISO 9000 institutions, either on a organisational-wide basis or on a departmental scale (Clark and Appleby, 1997; Gaster, 1995; Lentell and Morris, 2001; Paddon, 1992; Sanderson, 1992). In the UK, this approach is strongly associated with the CCT regime and became part of the strategy for local authority units to win contracts for service provision. The ISO 9000 series emphasises the need to establish formal systems of quality control in order to guarantee that products and services conform to specified standards. However, such norms do not intend to constitute (and cannot be regarded as) a TQM model, despite the fact that their breadth has been considerably enlarged in the recent 2000 revision.

In addition, some local authorities have been applying the SERVQUAL approach (Donelly and Shiu, 1999; Donelly *et al.*, 1995; Foster and Newman, 1998) to measure quality in a variety of services such as libraries, museums, and town planning.

There is also a number of municipalities that adopt a business excellence framework (see Proceedings of the 1st Quality Conference for Public Administrations in the EU), such as the EFQM/BEM or some variant of the MBNQA model (Dean and Helms, 1996). Nevertheless, as mentioned previously, quality award frameworks have important drawbacks as conceptual and measurement models.

It must therefore be acknowledged that no comprehensive Organisational Excellence models were specifically developed and empirically tested in the Local Government context.

3.9. CONCLUSION

Within the Public Sector, local authorities appear to be in the best position to develop and implement TQM initiatives. Once the outcomes of such efforts are evaluated, successful experiments can (and should) then be shared and extended to other public institutions.

This chapter discussed the complexity of TQM implementation in the Local Government. The importance of addressing several particularities and distinctive characteristics of the Public Sector was stressed.

On the whole, the scenario makes it more difficult for public organisations to implement principles such as customisation and customer responsiveness and calls for a careful interpretation of some TQM elements. We believe, however, that TQM principles and core concepts are flexible enough to accommodate different interpretations and to be applied differently according to each organisational context.

Therefore, we conclude that Organisational Excellence is an equally legitimate goal for Local Government and TQM a valid approach to pursue it. As emphasised in the literature, TQM implementation not only can potentially make public services more effective and efficient, but it can also contribute to enhance local democracy and promote citizenship.

However, to achieve these goals, TQM has to overcome obstacles essentially associated with the bureaucratic culture that, according to most views, and in spite of recent reforms, still prevails in the Public Sector.

Evidence of the application of TQM in the Public Sector primarily comes from anecdotal cases and is rarely integrated in a model that can be empirically tested and validated. From the literature review, it becomes clear that there is a need to identify and validate the critical dimensions of TQM and OE in the Local Government and to develop a conceptual and measurement model for implementing such principles and core concepts.

With particular reference to the Portuguese municipalities, this research aims to make a significant contribution in this regard, using a structural equation modelling approach (see Chapter 5). The model we propose assesses OE from different stakeholders' perspectives (see Chapter 6 and 8) and combines them to form a integrated and comprehensive system for measuring performance in the Local Government (see Chapter 9).

As discussed in Chapter 2, Kanji's Business Excellence Model (KBEM) is, in our view, the most appropriate framework to be used in the development of the organisational excellence model for the Local Government. Next chapter reports the main findings of our exploratory study of TQM in the Portuguese municipalities. That study, among other objectives, assesses the relevance of the KBEM constructs in the Local Government and provides important indications to their customisation and interpretation.

CHAPTER 4. EXPLORATORY STUDY OF TOTAL QUALITY MANAGEMENT IN THE PORTUGUESE MUNICIPALITIES

This chapter mainly presents the results of an exploratory research aiming to get an overview of the current state of TQM implementation in the Portuguese municipalities, with a particular emphasis on the main approaches followed, barriers experienced and motivations for introducing TQM. At the same time, the study intends to identify and validate the critical success factors (CSFs) to be considered in the Organisational Excellence Model for the Portuguese municipalities.

Different methods of collecting data were considered for the purposes of this research and, finally, a survey using a self-administered questionnaire was chosen as a most suitable option (see Section 5.3 for a discussion on the pros, contras of the survey method). All the 308 municipalities existent in Portugal were targeted.

The first section describes the steps followed in the preparation of the survey, particularly the definition of its objectives, questionnaire design and administration procedures. Next, in Section 4.2, dedicated to data analysis, a summary of the main findings is presented. Finally, in Section 4.3 some conclusions are drawn and the implications of this study to the measurement of Organisational Excellence discussed.

4.1. AIMS, OBJECTIVES AND DATA COLLECTION PROCESS

In the preparation of this survey, we started by setting its objectives, namely:

- to assess the state of quality initiatives carried out by the municipalities;
- to identify the approaches and tools used by the municipalities when applying quality principles and concepts;
- to understand the main barriers and difficulties faced when implementing quality initiatives; and
- to set a foundation for the development of the Organisational Excellence model for the Portuguese Municipalities.

Therefore, the survey is simultaneously descriptive – since it seeks to characterise the existing scenario in terms of TQM implementation (when the process started, who is the

responsible for the kick-off and which approaches are being followed) - and explanatory, in that it tries to analyse why TQM is being introduced, what kind of barriers are preventing TQM to be adopted and which are the potential drivers behind the success of its implementation.

From the different survey techniques available, it was decided that a postal questionnaire would be the most suitable option due to the need of economically reaching a large number of institutions (more than 300 municipalities) in a relatively short period of time.

The selection of an appropriate sample is not at stake here, since we decided to send the questionnaire to all the existing municipalities in Portugal.

In the preparation of this survey, we started in December 1999 by conducting some interviews with people from Local Government centres and public agencies responsible for proposing and implementing reforms and modernisation programmes in the Portuguese Public Sector. This initial fieldwork brought the benefits of listening to people who simultaneously have a wide perspective of the local government reality (including the legislative scenario) and some familiarity with quality management issues. Such preliminary efforts helped us to identify some relevant topics (in addition to those that we had already identified from the literature review) and use a language that could be easily understood by local government members.

Existing questionnaires with similar purposes were also reviewed. Among the instruments available, the questionnaire used by Tambi (2000) was an important reference. Some questions were added, several were eliminated and many had to be changed to meet the language and context of Local Government institutions.

A pilot test of the questionnaire on a small sample of the target population was carried out. Both the length of time necessary to complete the questionnaire and the proper understanding of the questions were monitored. Moreover, a small group of experts was contacted to comment on the relevance and suitability of the proposed questions, thus assessing the content validity of the questionnaire. Based on this feedback, some changes in the wording of the questions were made and a small number of items eliminated.

Since it is likely that the questionnaire will not be completed unless the investigation is perceived to be of direct value to the respondent, we have tried to explain the importance

of the topic to the Local Government, by involving the Portuguese Association of Municipalities (ANMP), which actively collaborated in this study taking the responsibility for the mailing and attaching a letter highlighting the interest of the subject. This institutional support complemented our covering letter explaining the purpose of the questionnaire and ensuring the anonymity of the replies.

Given the wide range of issues raised in the questionnaire and the request for an overall assessment of the municipality performance in different areas, it was considered that the Mayors of the municipalities were the most appropriate targets, having not only the necessary skills to understand the questions, but also possessing the knowledge (and power) to answer them. Anticipating the possibility of political leaders delegating the task of completing the questionnaire to a particular department/person, a field was included where details about the person who completed the questionnaire could be provided.

The questionnaires along with the covering letters were posted to the Portuguese municipalities during May 2000 and the deadline to return the questionnaires was set to the 31st July 2000.

Both qualitative and quantitative data were collected, though the emphasis was on the later. Moreover, the questionnaire combines factual and opinion questions. Factual questions essentially focus on which approaches are being adopted in the institution, for how long, and how is their impact being measured, while opinion questions mainly ask respondents to rank problems and barriers, to assess the current situation and to anticipate future developments.

Similarly, closed and open-ended questions were included, with an emphasis on the former group, in order to keep the questionnaire as short and straightforward as possible. List, category and ranking questions dominate. The advantages of closed questions are that they are cheaper to use and analyse and also permit easier comparability between respondents' answers (Williams, 1997). However they also compartmentalise people into preset categories, meaning that the most likely replies have to be carefully anticipated. In our questionnaire, those categories were at some extent the result of preliminary interviews, which were important to devise a set of categories covering as comprehensively as possible the full range of responses which could be given to each particular question.

The resulting questionnaire (see Appendix A) has 38 questions plus a final section where some basic information on the municipality and contact person is gathered. In order to assist respondents in completing the questionnaire, a small glossary was also included where definitions of some key terms are provided.

The main topics covered in the questionnaire can be summarised as follows:

- Quality concept adopted by the institution;
- Extent of Total Quality Management implementation;
- Reasons for Quality management implementation and main barriers experienced;
- Application of quality tools and concepts;
- Existence of a Quality Culture;
- Understanding of Critical Success Factors;
- Supply management; and
- Organisational performance.

4.2. DATA ANALYSIS AND GENERAL FINDINGS

The aim of questionnaire analysis is, at a large extent, to examine patterns among replies and explore relationships between variables that the questions represent (Williams, 1997).

The analysis to be performed certainly depends on the type of data collected. In this study, we collected a considerable amount of data whose values could not be measured numerically but could rather be classified into sets or categories. Categorical data can be further subdivided into nominal and ordinal (Saunders *et. al.*, 2000). Obviously, the more precise the level of measurement the greater is the range of analytical techniques available.

The coding process, i.e. the allocation of a numeric code to each category of a variable, was the first step in preparing data for computer analysis. In the case of open questions, from the review of the responses whenever possible categories were created. Responses were then categorised and coded.

During this step, we had also to deal with another potential cause of bias – the item non-response that may occur due to lack of understanding of the issues involved or unwillingness to answer certain questions that respondents believe to be sensitive or

embarrassing. Furthermore, in some cases, answers had to be rejected because respondents failed to record all the information required.

Having completed these introductory tasks, the data matrix was ready for analysis. In the case of this exploratory survey, there was little need to go beyond the use of descriptive statistics that can be easily calculated using most software packages. To summarise and analyse the data, Excel and SPSS were used and tables and diagrams created. The main findings are presented next.

4.2.1 Overall Response Rate and Respondents Profile

As shown in Table 4.1, the overall response rate achieved was 29.2%, which must be regarded as good, taking into account the characteristics of the targeted population and the fact that the topic under examination is still not regarded as a top priority by some municipalities.

	Municipalities	Respondents	Response rate (%)
Portugal	**308**	**90**	**29.2**
Mainland	278	80	28.8
Azores	19	8	42.1
Madeira	11	2	18.2

Table 4.1. Response rate for the exploratory study

Table 4.2 provides some information about the respondents. It can be seen that large, medium and small municipalities (according to their population) are properly represented. It can be added that the average number of employees for the sample is 345, with 7 municipalities indicating that they employ over 1,000 people.

In terms of geographical coverage, the results are also very reasonable. The participation rate is particularly high in the South Portugal, Metropolitan Area of Lisbon and Azores. The Littoral North is the less represented area.

	No. of participants	% of the existing total in the country
Geographical distribution		
Aveiro	6	31.6
Beja	5	35.7
Braga	2	14.3
Bragança	4	33.3
Castelo Branco	2	18.2
Coimbra	5	29.4
Evora	1	7.1
Faro	4	25.0
Guarda	3	21.4
Leiria	3	18.8
Lisboa	8	50.0
Portalegre	7	46.7
Porto	3	16.7
Santarém	5	23.8
Setúbal	6	46.2
Viana do Castelo	1	10.0
Vila Real	5	35.7
Viseu	10	41.7
Açores	8	42.1
Madeira	2	18.2
Dimension (Population)		
More than 100,000 inhabitants	9	39.1
Between 10,000 and 100,000 inhabitants	45	24.9
Less than 10,000 inhabitants	36	34.6
Participants in the exploratory study	90	308

Table 4.2. Profile of the respondents

4.2.2. Quality Concept Adopted

As discussed in Chapter 2, there is not a unique and ultimate definition of Quality. On the contrary, several definitions have been proposed in the literature, each of them with a different focus. Among those, the most common were included in the questionnaire and

respondents asked to indicate the concepts that better reflected the way Quality is regarded by the municipality.

Definition	Number of responses	%
Fitness for use	10	11.1%
Fitness for strategic purpose	22	24.4%
Meeting citizens' expectations	70	77.8%
Conformance to requirements	17	18.9%

Table 4.3. Meaning of Quality to the municipalities

Note: Since this was a multiple-response question, percentages do not add to 100%, but simply refer to the proportion of municipalities that ticked a particular definition of Quality.

Table 4.3 shows that "meeting citizens expectations" is by far the preferred Quality definition. Such a preference is a clear sign that municipalities think that quality in public services must be citizen-oriented.

This "customer-orientation" is precisely one of the dimensions of the definition proposed by the Quality System for Public Services (QSPS), which states that "Quality in the public services is a management philosophy that aims to achieve higher effectiveness and efficiency, fighting the bureaucracy, simplifying processes and procedures and satisfying the needs and expectations of the citizens" (Law-Decree 166-A/99).

4.2.3. Extent of Quality Management Implementation

- 54 municipalities (i.e. 60% of the respondents) state they do not implement quality management in any form;
- 36 municipalities (i.e. the remaining 40%) report that they have in place approaches and procedures for improving the quality of the processes and services they provide;
- However, from these 36 municipalities, only 13 (36%) consider they have implemented TQM.

Table 4.4 illustrates the approaches that the municipalities are following in their Quality Management efforts.

Formalised Approach	Number of responses	%
ISO 9000 certification	1	2.7%
Total Quality Management	13	36.1%
Portuguese Quality System for Public Services	9	25.0%
Quality Charter	12	33.3%
Other	6	16.7%
None in particular	6	16.7%
Total number of municipalities implementing quality initiatives	**36**	

Table 4.4. Approaches used to implement quality initiatives

Thirteen municipalities regard themselves as TQM institutions, what represents nearly 15% from the respondents. The number is promising even if, in several cases, further responses concerning the application of concrete tools and methodologies indicate that some quality efforts are still unsystematic and limited to some areas of the organisation.

It is interesting to notice that a significant number of municipalities use their own quality charter as a guide to implement quality practices. This fact shows that Quality is being regarded as a strategic issue, rather than as a simple set of methods and techniques.

ISO9000 standards, which in other contexts are seen as important driving forces for Quality Management implementation, do not appear to have the same central role in the Portuguese Local Government. This is consistent with Kloot and Martin's (2000) findings for the Australian local authorities which emphasise that formal quality assurance is viewed as "expensive and time consuming, with too much focus on process and documentation and not enough on the quality of the services as perceived by the end user".

On the contrary, the Quality System for Public Services (QSPS), set up to increase confidence in public services and eliminate non-value-adding activities and documents, is stimulating many municipalities in their search for new management approaches. The QSPS establishes the possibility of conferring certificates to those public services that demonstrate to have in place a comprehensive and trustful quality system according to the criteria of the EFQM/BEM.

Among other approaches followed, it is relevant to notice that some municipalities are using the legislation on administrative modernisation (Law-Decree n. 135/99) as a reference to implement TQM.

Most Quality Management initiatives (more than three-quarters) were initiated within the last 5 years, with 14 municipalities indicating that they have started to adopt Quality Management in the last 2 years. This statistic demonstrates that the Portuguese Local Government is increasingly interested in this management philosophy, though it is also a sign of the relative delay in its adoption.

In terms of the extent of Quality Management implementation, around 40% of the respondents report they have implemented it on a institution-wide basis and a slightly higher percentage (44%) state that they apply quality management practices in at least some divisions or departments. Only a minority have limited its implementation to a few projects or work units. This scenario clearly reveals that municipalities recognise that, to be effective, Quality Management needs to be applied in a large-scale with the leadership support and commitment.

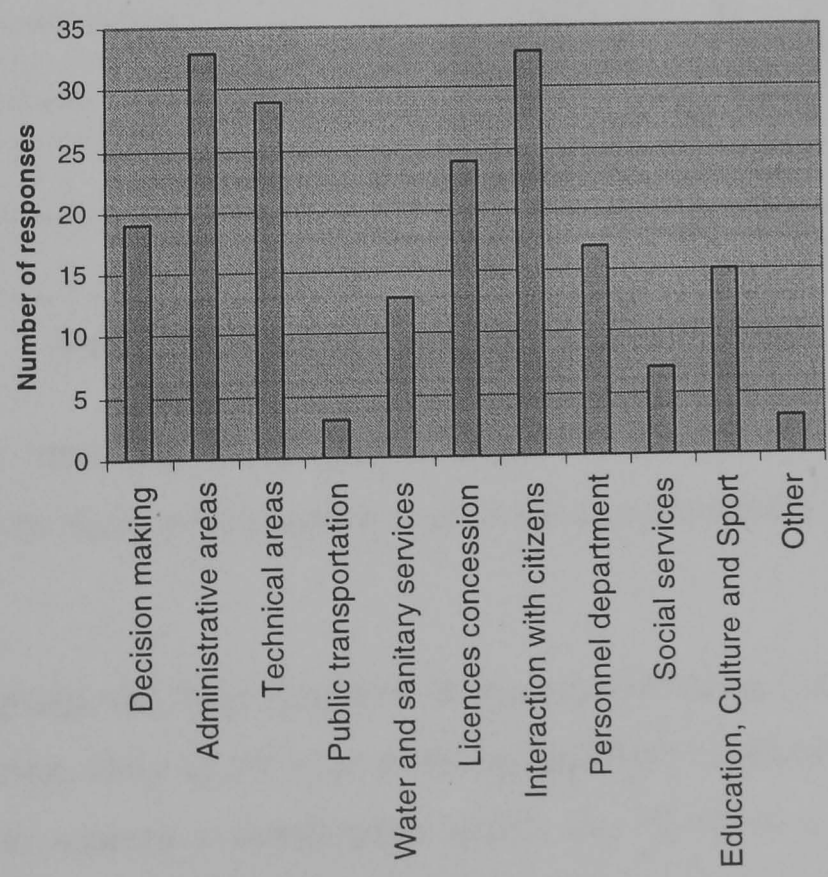

Figure 4.1. Areas where Quality Management is being implemented

Looking at the functional areas where Quality Management has been implemented (see Figure 4.1), administrative and citizen-related services are the most representative areas, although Quality Management is being applied to technical services and decision-making processes in many municipalities.

Even in the cases where no Quality Management approaches currently exist, there is a willingness to start implementing TQM approaches in the near future (see Table 4.5). Only 5 municipalities (5.5 % of the respondents) do not indicate future intentions of initiating any kind Quality Management initiatives.

Plan	**Municipalities that have somehow already initiated the Quality journey**		**Municipalities that have not yet initiated the Quality journey**		**Overall results**
Obtain ISO 9000 certification	4	13.3%	3	5.0%	7.8%
Bid for Quality Award	6	20.0%	3	5.0%	15.0%
Obtain the certification within the QSPS	9	30.0%	0	0.0%	30.0%
Implement TQM	21	70.0%	22	36.7%	47.8%
Conduct a self-assessment exercise	16	53.3%	29	48.3%	50.0%
Pursue Business Excellence	8	26.7%	14	23.3%	24.4%
Other	3	10.0%	5	8.3%	8.9%
Total Municipalities	30		60		90

Table 4.5. Quality Management Future Plans

In Table 4.5, we separated municipalities where some sort of Quality Management approach exists from those which have not yet started to implement Quality Management in any form.

Among the first group, the large majority of the municipalities intend to initiate/pursue TQM implementation. Only 13.3% plan to obtain ISO9000 certification in the next years, but 30.0% hope to achieve a certification within the QSPS. Just 6 municipalities are preparing to bid for a quality award, although more than half aim in the future to conduct self-assessment exercises.

The importance of self-assessment is similarly recognised by those municipalities which have not yet initiated the quality journey. Conducting self-assessment is the preferred path to set off quality efforts. More than one third of the municipalities in this group expect to implement TQM, but they feel very insecure about obtaining any kind of certification in the near future.

4.2.4 Process of Quality Management Implementation

There is a large consensus in the literature that the leadership role is critical for successful TQM implementation (Dale *et al.*, 1997; Deming, 1986; Flynn *et al.*, 1995; Grant *et al.*, 1994; Oakland, 1999; Zairi, 1995, 1999).

Our findings corroborate the idea that political leaders have a key role in the introduction and promotion of Quality Management in Local Government (Ingraham, 1995; West *et al.*, 1993).

Quality Management Introducers	**Number of responses**	**%**
Mayor	33	94.3%
Executive body	18	51.4%
Municipal assembly	1	2.9%
Department/ Division director	16	45.7%
Quality Director	1	2.9%
Other staff member	3	8.6%
Citizens/Customers	4	11.4%
Other	5	14.3%
Total number of responses	**35**	

Table 4.6. Key elements in Quality Management introduction

Accordingly, Table 4.6 shows that Mayors (mentioned in 94.3% of the cases) were the key element in the implementation of Quality Management, in the majority of the situations (51%) with the early involvement and support of the municipality's executive body.

Quality Management has also been introduced and promoted by a significant number of department and division directors.

Therefore, one can conclude that the large majority of the municipalities consider that Quality Management implementation has to be led internally, with the responsibility for its promotion being assumed by the top levels of the hierarchy.

The institutional structure that supports Quality Management varies. However, Quality Management seldom exists in a completely dedicated structure.

Formal structure for quality management	Number of responses
Quality Department/Division	3
Other Departments/Divisions	15
Teams	14
Others	6

Table 4.7. Formal structure adopted

As shown in Table 4.7, only three municipalities have a Quality Department/Division. More often, formal responsibility for quality management is placed within the General Administration and Financial Division. Furthermore, a large proportion of the municipalities use teams to deal with quality management issues, thus demonstrating the importance of cross-functional approaches to TQM. It is interesting to observe that several municipalities did not answer this question or did not indicate any particular structure. This might be a sign that Quality Management is still in an early state in the municipality.

4.2.5. Main Reasons for Quality Management

The identification of the main reasons for implementing Quality Management in the Portuguese municipalities was based on the responses provided to an open question where respondents were asked to indicate up to five motivations and prioritise them.

The analysis of the content of these answers led to the identification of 46 distinct reasons for implementing TQM (see Table 4.8). Looking at their underlining meaning they were

then grouped into 9 main categories. The corresponding scores were calculated as weighted sums, according to the importance assigned by the respondents

Overall Rank	Reasons for Implementing TQM	Number of responses	Average Importance*	Score
	Customer/Citizen-oriented			
1	Improve citizens/customers satisfaction	8	5.0	40
3	Meet citizens' needs and expectations	6	4.0	24
6	Closeness to citizens	5	4.4	22
9	Improve citizens/customers relationships	3	4.3	13
31	Reduce customer/citizen complaints	1	3	3
	Subtotal	**23**	**4.4**	**102**
	People management-oriented			
3	Staff motivation	7	3.4	24
11	Better working conditions	2	4.5	9
20	Improve internal communication	1	5.0	5
20	Build a more supportive working environment	2	2.5	5
20	Staff qualification	2	2.5	5
26	Employee/Staff satisfaction	1	4.0	4
36	Valorise Human Resources	1	2.0	2
	Subtotal	**16**	**3.4**	**54**
	Results-oriented			
2	Improve the quality of the services provided	7	4.6	32
10	Increase effectiveness and goals achievement	3	4.0	12
12	Contribute to the overall economic and social development of the community	2	4.0	8
	Subtotal	**12**	**4.3**	**52**
	Resources-focused			
8	Better use of the resources	6	3.0	18
12	Increase efficiency in services provision	2	4.0	8
17	Technological modernisation	2	3.5	7
26	Improve cost efficiency	1	4.0	4
26	Cost reduction	2	2.0	4
31	Increase productivity	1	3.0	3
42	Downsizing	1	1.0	1
	Subtotal	**22**	**3.1**	**45**
	Strategic management-oriented			
5	Improve celery/swiftness	7	3.3	23
18	Image building	4	1.5	6
20	Consistency of purpose	2	2.5	5
31	Strategic planning	1	3.0	3
36	Build a modern institution	1	2.0	2
	Subtotal	**8**	**2.0**	**39**

	Process-oriented			
7	Fight bureaucracy/Simplify procedures	7	2.7	19
12	Processes excellence	3	2.7	8
18	Build a more flexible organisation	3	2.0	6
31	Better internal organisation	1	3.0	3
	Subtotal	**14**	**2.6**	**36**
	Data-oriented			
12	Fact-based management	3	2.7	8
26	Improve the access to information	1	4.0	4
36	Produce reliable and updated data	1	2.0	2
42	Documental control and access	1	1.0	1
	Subtotal	**6**	**2.5**	**15**
	Culture-oriented			
12	Promotion of a continuous improvement culture	4	2.0	8
26	Implementation of a Quality Culture	1	4.0	4
	Subtotal	**5**	**2.4**	**12**
	Other reasons			
20	Meet legislation requirements	1	5.0	5
20	To satisfy accreditation requirements	2	2.5	5
31	Feeling of achievement	1	3.0	3
36	Increase transparency	1	2.0	2
36	Decentralise services provision	1	2.0	2
36	Implementation of a quality assurance system understood by everyone	1	2.0	2
42	Promote a spirit of public service	1	1.0	1
42	Services modernisation	1	1.0	1
42	Obtain certification	1	1.0	1
	Subtotal	**10**	**2.2**	**22**

* Respondents were asked to give a maximum of five reasons to implement quality management and rank them. 5 points were assigned to the most important reason; 4 points to the next one and so on.

Table 4.8. Reasons for Quality Management

Customers are at the core of Quality Management implementation – to improve customer/citizen satisfaction (40 points) and meet their needs and expectations (24 points) are main concerns for the Portuguese municipalities.

To improve the services provided (32 points), increase celerity (23 points) and make better use of the resources available (18 points) also rank high in the respondents' preferences.

Perhaps even more interesting is the fact that staff motivation (24 points) appears to be behind the introduction of Quality management practices in many municipalities.

Most of the reasons shown in Table 4.8 are probably applicable to any context. However, other motivations identified may be regarded as typical of Local Government organisations. That is particularly the case of the following rationales for adopting Quality Management:

- To bring public administration closer to citizens -22 points-, which may suggest that municipalities see Quality Management as a philosophy capable of enhancing transparency, citizenship, and democracy;
- To fight bureaucracy/simplify procedures -19 points-, showing that TQM is regarded as a main catalyst to processes management, reduction of paperwork, and elimination of non-value adding activities;
- To contribute to the overall economic and social development of the community - 8 points -, stressing the importance of taking into consideration the overall impact on society when assessing the municipality performance.

Overall, our results show that the driving forces for TQM implementation discussed in section 3.4 are thus also valid for the Portuguese municipalities. Two of the motivations pointed out by Appleby and Clark (1997) – the rise of customer expectations and constraints on spending – seem to be behind many of the reasons indicated by the respondents. Additionally, the importance of people management-oriented motives, especially the need to motivate staff, corroborates other findings reported in the literature (Dean and Helms, 1996; Kaboolian, 2000; Redman *et al.*, 1995).

4.2.6. Main Barriers to Quality Management

In this case, the questionnaire listed a relative large set of barriers identified from the literature review (see Section 3.5), with a particular emphasis on those aspects potentially more relevant to the Local Government (Appleby and Clark, 1997; Dewhurst *et al.*, 1999; Madsen, 1995; Radin and Coffee, 1993; Skelcher, 1992a; Swiss, 1992).

Table 4.9 shows the top 10 barriers to Quality Management.

Top 10 Barriers to Quality Management		Number of responses	Average Importance*	Score
1	Resistance to change	23	3.6	82
2	Staff were pressed with daily work	18	3.3	59
3	Insufficient knowledge or skill	17	2.9	49
4	Poor motivation due to the lack of immediate results	17	2.4	40
5	Lack of knowledge about quality approaches and tools	20	2.0	39
6	Problems in translating to the institution's context some concepts (such as customer, supplier, product and process)	19	1.7	32
7	Insufficient budget	14	1.6	23
8	Fear of failure	8	2.6	21
9	Lack of leadership commitment	12	1.6	19
10	The barrier of middle management	11	1.6	18
	Total number of respondents	**31**		

* Respondents were asked to rank a maximum of five barriers to quality management implementation. 5 points were assigned to the most important barrier; 4 points to the next one and so on.

Table 4.9. Top 10 Barriers to Quality Management

With reference to the general process of reform in the Portuguese Public Administration, Lampreia (1997) suggests the existence of the following impediments: centralism, pronounced hierarchies, formalism, short-termism, lack of co-ordination, excessive attachment to rules and norms and public servants apathy. Although some of these factors were not explicitly mentioned in the survey, they help to explain the main barriers identified.

Resistance to change (82 points) was mentioned by almost three-quarters of the respondents. This reflects, in particular, the characteristics of inflexibility and predictability typical of the bureaucratic culture still prevalent in many municipalities. As Lampreia (1997) stresses, overcoming the resistance requires preparing people for the changes, explaining why and how they will occur, involving them in the process and helping them to adjust, by providing appropriate training.

It is worth to notice that lack of leadership commitment, pinpointed by most researchers as the main reason for TQM failure (Dale *et al.*, 1997; Oakland, 1999; Thiagarajan and Zairi, 1997a), only ranks ninth in the list. This might be partially explained by the fact that the

questionnaire was mainly completed by the political leaders of the municipalities. Similarly, middle management, who are often unwilling to give power and authority up, do not seem to be a primary concern.

On the other hand, respondents indicate the lack of both financial resources (23 points) and human resources (59 points) as main barriers for introducing TQM.

The study also supports the existence of a crucial barrier for TQM implementation that is often highlighted in the Public Sector literature. In fact, short-term vision (Chen and Sawyers, 1994; Morgan and Murgatroyd, 1994; Radin and Coffee, 1993) is a prevailing problem in many municipalities, making it difficult to give Quality the necessary time to produce results.

As Worrall *et al.* (1998) note, "by their very nature local authorities face particular difficulties in developing and sustaining a strategic approach at the corporate level". Strategies necessary reflect political values and projects, and these tend to be somewhat volatile, according to the electoral and democratic basis. Moreover, most municipalities operate through a committee system where different parties are represented. This means that, for better or for worse, it is difficult to define a consensual and strong strategic direction.

	Ranking				**Average ranking**
	1st	2nd	3rd	4th	
Listening to citizens	6	21	8	0	**2.06**
Fire-fighting	16	4	11	4	**2.09**
Strategic Planning	11	6	11	7	**2.97**
Listening to the staff	2	4	5	24	**3.46**
Number of respondents	**35**				

Table 4.10. Time spent in different activities

The lack of strategic management is reinforced by the fact that many municipalities spend a great amount of time "fighting fires" (see Table 4.10). In effect, almost a half of the respondents recognises that solving immediate daily problems occupies most of their time. This suggests that prevention, stressed by many authors as a critical success factor and a

worthwhile investment (Kanji, 1998), is not yet being practised in the Portuguese Local Government.

However, perhaps the most relevant finding that emerges from Table 4.9 is the high number of responses mentioning insufficient knowledge in general (49 points), and, in particular, lack of expertise in quality approaches and tools (39 points) as major impediments for TQM implementation.

This is corroborated by other research findings indicating that, from the municipalities implementing quality approaches, no more than 6% consider they have a high level of expertise in TQM. The majority (57%) evaluates as 'somewhat reasonable' their level of expertise, but a reasonably large proportion (31%) recognises that they only have minimal competencies for TQM implementation.

Moreover, one-third of the municipalities report that they do not have in place education and training plans. This is somehow inconsistent with the assessment made by the municipalities in terms of education and training opportunities provided (see Table 4.11).

In terms of organisational members		**In terms of areas covered**	
Only political leaders have access	3.4%	Only some areas	31.8%
Only directors have access	3.4%		
Only senior staff have access	3.4%	All areas	68.2%
All members of the institution have access	89.7%		

Table 4.11. Extent of education and training provided by the municipality

In fact, almost 90% of the municipalities report that all members have access to education and training. In terms of areas covered, the scenario is rather different. For around one-third of the municipalities, education and training opportunities do not cover all areas.

Quality is likely to be one of the areas that have been left behind. Indeed, as shown in Figure 4.2, among the municipalities adopting quality approaches in any form, there is not a single one considering that the amount of training in Quality Management issues provided to staff members is sufficient to prepare and support quality initiatives. Additionally, more than one-quarter of the respondents regard the existing training as

clearly insufficient and two municipalities state that they do not have quality education at all.

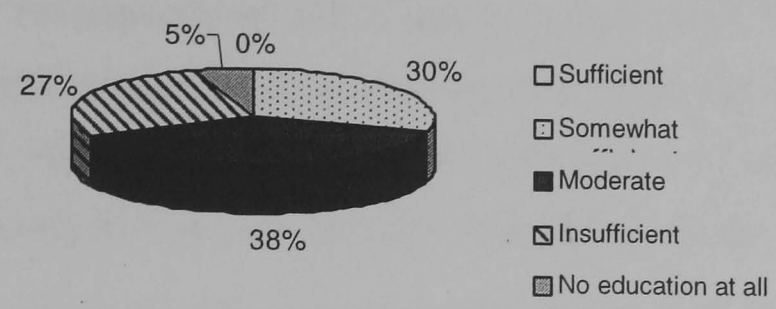

Figure 4.2. Amount of education and training in Quality Management

The apparent lack of expertise in Quality Management issues is rarely being addressed by engaging external consultants in the process of TQM implementation. Responses to that particular question show that only about a quarter of the municipalities use consultants on a regular basis; one-third hardly ever integrate external consultants in this quality efforts; and around 25% have never contacted external consultants to assist in the process of TQM implementation. Some possible explanations exist. Consultants tend to be regarded with mistrust and municipalities do not want to expose themselves to "external eyes". On the other hand, consultants sometimes lack the necessary knowledge and sensibility to understand the particularities of the Local Government context.

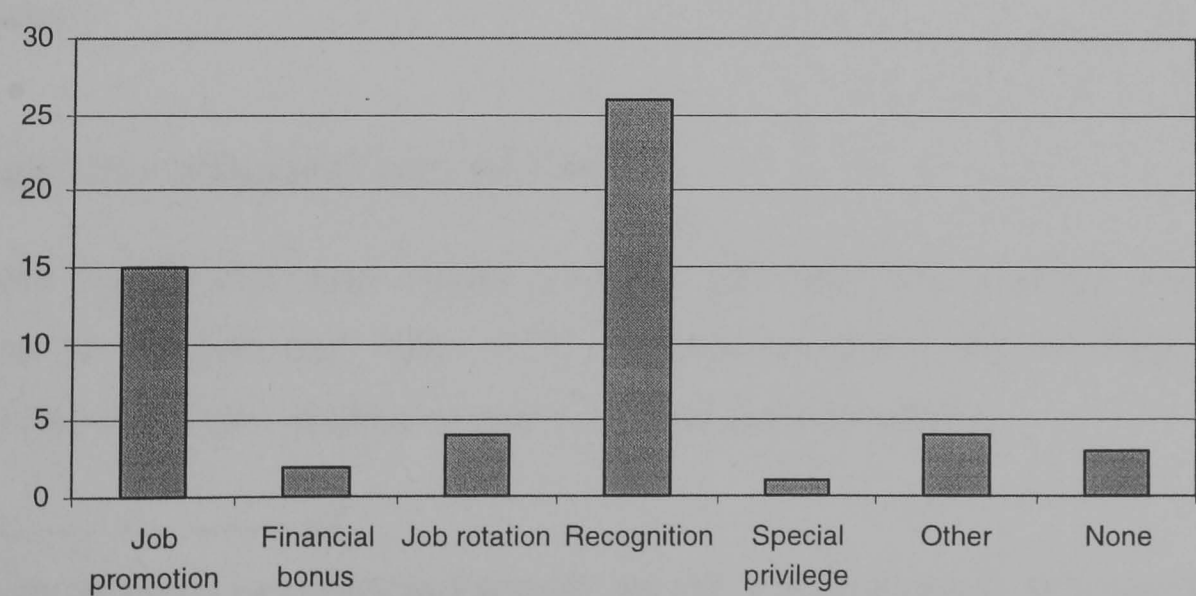

Figure 4.3. Types of motivation for people who contribute towards Quality Improvement

Finally, another very important obstacle to quality management is the lack of instruments to motivate people who contribute towards quality (see Figure 4.3).

- The most usual methods used to motivate people are job promotions (mentioned by nearly 40% of the respondents) and recognition (applied in 70% of the municipalities);
- Only a very small proportion of the municipalities (less than 10%) provide economic rewards to employees that make important contributions to quality management;
- 3 municipalities report they have no motivation methods at all.

This scenario is somehow characteristic of the Public Administration, where limited freedom exists to implement a wide range of motivational techniques. Part of these constraints lies in the legislative framework and part is due to the strong bureaucratic inheritance, which imposes strict rules and values, almost exclusively based on, seniority, hierarchical ranking and academic qualifications (Rocha, 1999).

As a matter of fact, in the fieldwork conducted to prepare this survey and in personal contacts with local government members, the lack of means to reward performance was a recurring issue. Municipalities often claim that the only instruments they have to acknowledge people who outperform are the annual appraisal reports[3] (which have a somehow limited impact on job promotions) and words of praise from the leadership. As Allen and Kilman (2001) emphasise, the role of the reward system is very important to support TQM. In order to promote Organisational Excellence, there is, hence, a crucial task to be done in the Public Sector linking rewards to performance and introducing new forms of motivation.

4.2.7 Application of Quality Tools and Concepts

The survey reveals that most quality tools are still unknown to Local Government institutions in Portugal (see Table 4.12). Possible exceptions are flawdiagrams and brainstorming techniques, applied by nearly a half of the respondents.

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[3] Theoretically, the system uses criteria such as quality and volume of the work done, knowledge, flexibility, professional development, and human relations. However, as Nunes (1999) highlights, rather than being used to assess education and training needs, motivate employees and contribute to improve their productivity, the annual appraisal scheme is merely applied to comply with legal requirements. It does not take into account the organisation's objectives and does not promote any interaction or discussion between the employee and the evaluator. It tends to classify everyone equally, without making distinctions (Machado, 1999). Therefore, it does not work as a management tool.

Quality Tools	Frequency	%
Fluxograms/Flawdiagrams	11	39.2%
Histograms	1	3.6%
Fishbone diagrams	3	10.7%
Pareto charts	0	0.0%
Control charts	3	10.7%
Affinity Diagrams (KJs)	0	0.0%
Brainstorming	12	42.9%
Quality Function Deployment	0	0.0%
Teamwork	27	96.4%
Quality Circles	4	14.3%
Total number of respondents	**28**	

Table 4.12. Quality tools applied

Table 4.12 shows that other quality tools, such as fishbone diagrams, control charts and Pareto diagrams are only used by a minority of the municipalities. More sophisticated tools, like Quality Function Deployment and affinity diagrams, are virtually unknown. From the 35 respondents, only one municipality uses quality costs.

These results are not surprising, given the lack of expertise and training in Quality Management, as reported earlier (see Figure 4.2).

The scenario concerning the use of benchmarking is by far more encouraging. In countries like the UK, benchmarking is regarded as a crucial element to disseminate 'good practices' (Stephens and Bowerman, 1997). In Portugal, more than 60% of the municipalities affirm that they compare themselves against other organisations. It is our belief, however, that these comparisons essentially result from informal networking and are hardly ever systematic and comprehensive.

As expected, the' internal customer' concept is also unfamiliar to a large proportion of local government officers. Figure 4.4 indicates that in no more than 4 municipalities (i.e. around 10% of the municipalities implementing quality approaches) all the employees know what "internal customer" means to them. In the majority of the municipalities, the concept is only understood by about a half of staff. A significant proportion of the respondents declares that less than a quarter of their employees are aware of their internal customers.

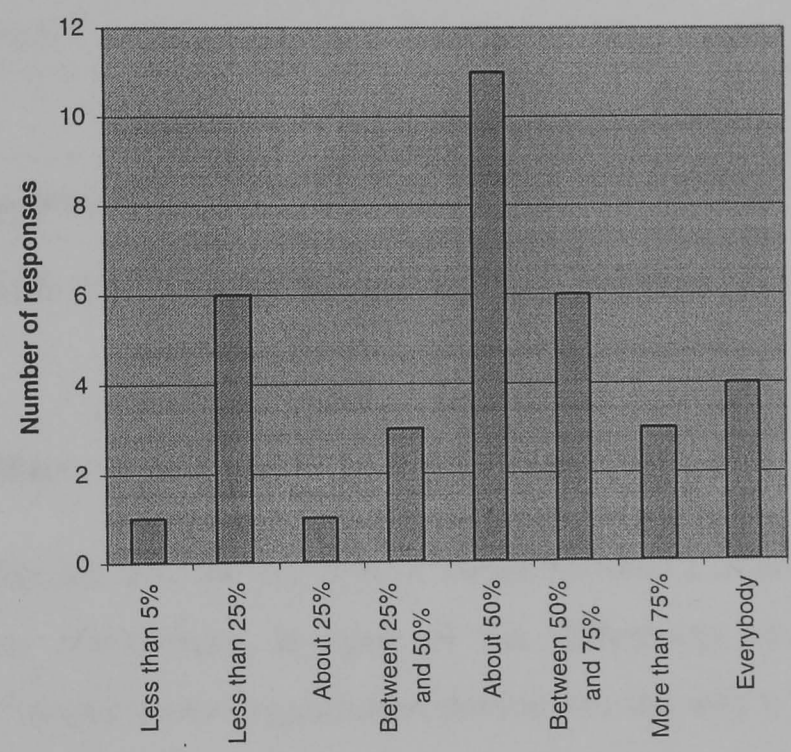


Figure 4.4. Internal Customer awareness

At the same time, most municipalities recognise that Quality is everybody's business. Everyone has an impact on Quality by the way they perform and therefore everyone must be involved in solving quality problems. Leadership is particularly responsible for implementing and controlling the quality of processes, but that responsibility is shared with the majority of staff members (see Table 4.13). This understanding is consistent with the TQM philosophy.

People who control the quality of processes	Number of responses	%
Mayor	34	91.9%
Executive body	30	81.1%
Department Heads	32	86.5%
Quality Director	3	8.1%
Technical staff	20	54.1%
Administrative staff	14	37.8%
Other	5	13.5%
Number of respondents	**37**	

Table 4.13. People that control the Quality of Processes

4.2.8. Quality Culture

As mentioned in Section 3.6, the concept of Organisational Culture has been defined and discussed by many researchers. In spite of the differences among them, there is a consensus that the culture of an organisation determines the way it interprets and reacts to the world around.

Therefore, an organisation committed to Quality is expected to have assimilated some values that will be embedded in its culture. Following Kanji and Yui (1997), "total quality management is the culture of an organization committed to customer satisfaction through continuous improvement".

Changes in Local Government culture, and, in particular, the departure from bureaucratic values and traditions, are regarded as essential to support Quality Management (Gaster, 1995; Grant *et al.*, 1994; Ingraham, 1995; Loomba and Spencer, 1997; Reed, 1995), allowing principles such as empowerment and innovation to be practised.

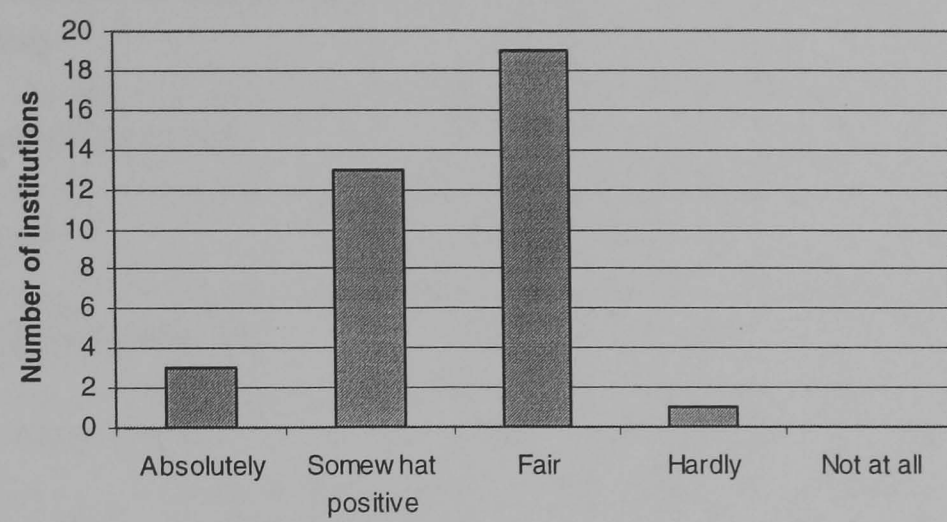


Figure 4.5. Existence of a Quality Culture

Figure 4.5 indicates that more than a half of the municipalities consider they need to further develop a Quality Culture, although respondents generally feel that some steps have already been taken. Over 40% are quite confident they have a solid Quality Culture embedded in their everyday activities.

Moreover, 35 out of the 36 respondents believe that the organisational culture has changed favourably over recent years and 22 report they developed specific programs to transform the organisational culture.

4.2.9 Understanding of Critical Success Factors

In chapter 2, Critical Success Factors (CSFs) were defined as the "limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation" (Kanji, 2002).

Municipalities were asked to assess the importance of several factors (including the ones embedded in KBEM – see Figure 2.2) and suggest other dimensions which they believe have a major impact on the success of a municipality.

Table 4.14 summarises the results and shows the degree of criticality of each factor in a scale ranging from 1 to 12.

Overall ranking	Critical Success Factors	Cases	1st	2nd	3rd	4th or bellow	Degree of criticality*
1	Leadership	34	15	1	2	16	9.32
3	Continuous Improvement	33	5	5	4	19	8.64
9	Prevention	30	0	2	1	27	5.03
7	Measurement of resources	33	1	2	4	26	7.36
6	Process Improvement	32	0	6	3	23	7.91
5	Internal Customer Satisfaction	31	0	4	8	19	8.03
2	External customer satisfaction	33	8	5	5	15	9.21
8	People management	31	2	4	2	23	7.25
4	Teamwork	34	3	5	4	22	8.06
10	Management by Fact	30	0	0	1	29	4.33
11	Suppliers involvement	30	0	0	0	30	2.73
12	Others	2	0	0	0	2	1.00
Total Number of Respondents		**34**					

* 12 points were assigned to the first priority, 11 to the second one, and so on. The resulting sum was divided by the number of cases to calculate the average importance of each CSF.

Table 4.14. Critical Success Factors Assessment

As shown in Table 4.14, findings support the validity of the proposed critical factors for the Portuguese municipalities. No other significant CSFs emerged in the survey.

Leadership was found to be the most critical factor, confirming its key role to the success of any institution, as suggested in KBEM, and in line with the conclusions of several other research studies (Ahire *et al.*, 1996; Anderson *et al.*, 1994a, 1994b; Dale *et al.*, 1997; Flynn *et al.*, 1995; Porter and Parker, 1993; Saraph *et al.*, 1989; Zhang *et al.*, 2000).

External customer satisfaction and continuous improvement also rank high in terms of criticality. On the contrary, in agreement with Quayle's (1998) findings for the UK

government sector, Portuguese municipalities do not regard supply management as a very important area. Prevention and management by fact also have relatively low scores.

In terms of the concrete application of each of these CSFs the scenario is quite different (see Table 4.15).

Overall ranking	**Critical Success Factors**	**Cases**	**1st**	**2nd**	**3rd**	**4th or bellow**	**Degree of criticality***
3	Leadership	29	9	2	3	15	9.24
2	Continuous Improvement	32	9	8	2	13	9.59
9	Prevention	24	0	2	1	21	5.58
8	Measurement of resources	29	0	0	3	26	6.83
4	Process Improvement	31	1	7	7	16	8.97
6	Internal Customer Satisfaction	28	2	2	6	18	7.86
1	External customer satisfaction	29	9	7	4	9	10.10
7	People management	26	1	1	4	20	7.69
5	Teamwork	32	2	4	4	22	8.25
10	Management by Fact	24	1	1	0	22	4.58
11	Suppliers involvement	21	0	0	0	21	2.29
12	Others	1	0	0	0	1	1.00
Total Number of Respondents		**34**					

* 12 points were assigned to the first priority, 11 to the second one, and so on. The resulting sum was divided by the number of cases to calculate the average importance of each CSF.

Table 4.15. Emphasis given to CSFs during TQM implementation

The first important observation is that not all factors are being widely applied within the municipality's quality management efforts. Table 4.15 shows, in particular, that prevention and management by fact are being somehow neglected.

External customer satisfaction is reported as the most critical factor followed by continuous improvement. Leadership only ranks third, which indicates that, either municipalities do not regard the role of leadership as much demanding to TQM implementation as it was perceived to the success of the municipality, or do not know how to translate its importance into concrete actions and behaviours. Since external customer satisfaction and continuous improvement probably are more assimilated concepts, the municipalities possibly have a more clear idea on how to practise them.

The large majority of the municipalities (94%) consider that the priorities given to the various critical success factors change over time. Besides, according to the respondents, the ranking assigned to the CSFs mainly reflects the municipality's policy (mentioned by 34 municipalities). The second influence is Government policy (with 9 references).

4.2.10 Supply Chain Management

Supplier management is often considered an essential element of TQM (Ahire *et. al.*, 1996; Badri *et. al.*, 1995; Black and Porter, 1996; Forza and Filippini, 1998; Flynn at al, 1995; Saraph *et al.*, 1989, Shin *et. al.*, 2000, Zhang *et al.*, 2000). The underlying message is that the selection of a small number of suppliers based on quality considerations and the establishment of long-term relationships leads to continuous improvement and superior performance.

As shown in Table 4.16, the large majority of the municipalities deal with a very large number of suppliers. To some extent, this can be explained by the wide number and diversity of the activities performed.

Moreover, the number of suppliers was expected to depend on the dimension of the municipality. Nevertheless, it was found that more than one-third of the municipalities has over 500 suppliers and even relatively small municipalities have many suppliers. In addition, Table 4.16 indicates that there are no substantial differences between TQM and non-TQM municipalities[4] in this regard.

[4] To simplify, we classify as TQM municipalities all those that follow any type of approach to implement quality management practices.

Approximate number of suppliers	Municipalities implementing Quality Management		Municipalities not implementing Quality Management		Overall	
Less than 20	0	0.0%	0	0.0%	0	0.0%
Between 20 and 50	1	2.8%	7	13.0%	8	8.9%
Between 50 and 100	6	16.7%	10	18.5%	16	17.8%
Between 100 and 500	12	33.3%	17	31.5%	29	32.2%
More than 500	14	38.9%	18	33.3%	32	35.6%
Don't know/Don't answer	3	8.3%	2	3.7%	5	5.6%
Number of respondents	**36**		**54**		**90**	**100%**

Table 4.16. Number of Suppliers

Looking at the criteria the municipalities use to select their suppliers (see Table 4.17), it can be observed that, with the exception of creating long-term partnerships, all other principles are widely applied.

	Price	Quality of the product/service	On time delivery	Creation of strategic partnership	Certified supplier
Utilisation rate	**98.2%**	**100%**	**94.7%**	**17.5%**	**52.6%**
1st priority	38	44	2	0	3
2nd priority	30	38	12	1	6
3rd priority	15	3	56	3	10
Relatively irrelevant	4	2	17	83	68
Number of respondents	**87**				

Table 4.17. Supplier Selection Criteria (I)

In the selection process, the quality of products and services provided ranks at the top for most municipalities, followed by price. The high importance assigned to price (the first priority for more than 40% of the respondents) is possibly linked to legislation requirements that force public sector organisations to follow procedures essentially based

on price comparisons and prevent them from establishing long-term agreements with suppliers.

Yet, selecting certified suppliers seems to be increasingly important to many municipalities. More than a half already takes it into consideration.

Table 4.18 examines whether there are significant differences between TQM and non-TQM municipalities in terms of the importance allocated to the different supplier selection criteria.

Findings indicate that, in fact, non-TQM municipalities place greater importance on price if compared to TQM institutions. For both TQM and non-TQM institutions, however, quality is the top criterion when selecting a supplier. On the other hand, the creation of supplier partnerships is practically irrelevant in the purchasing strategies of all municipalities. Somehow surprisingly is to notice that the importance assigned to selecting certified suppliers is superior for non-TQM municipalities.

	Municipalities implementing quality management		Municipalities not implementing quality management	
	Number of responses	%	Number of responses	%
Price				
1st priority	13	37.1%	25	48.1%
2nd priority	14	40.0%	16	30.8%
3rd priority	7	20.0%	8	15.4%
Not very important	1	2.9%	3	5.8%
Average importance*	**2.11**		**2.21**	
Quality				
1st priority	21	60.0%	23	44.2%
2nd priority	13	37.1%	25	48:1%
3rd priority	1	2.9%	2	3.8%
Not very important	0	0.0%	2	3.8%
Average importance*	**2.57**		**2.33**	
On time delivery				
1st priority	1	2.9%	1	1.9%
2nd priority	6	17.1%	6	11.5%
3rd priority	22	62.9%	34	65.4%
Not very important	6	17.1%	11	21.2%
Average importance*	**1.06**		**0.94**	
Certified supplier				
1st priority	0	0.0%	3	5.8%
2nd priority	2	5.7%	4	7.7%
3rd priority	4	11.4%	6	11.5%
Not very important	29	82.9%	39	75%
Average importance*	**0.23**		**0.44**	
Supplier Partnership				
1st priority	0	0.0%	0	0.0%
2nd priority	0	0.0%	1	1.9%
3rd priority	1	2.9%	2	3.8%
Not very important	34	97.1%	49	94.2%
Average importance*	**0.03**		**0.08**	
Number of respondents	**35**		**52**	

* Respondents were asked to rank a maximum of three supplier selection criteria. 3 points were assigned to the first priority, 2 to the second one and 1 no the third.

Table 4.18. Supplier Selection Criteria (II)

4.2.11. Quality Management and Organisational Performance

One of the topics that interest researchers the most is the link between TQM implementation and organisational performance (Adam *et al.*, 1997; Flynn *et al.*, 1995; Forza and Filippini, 1998; Mann and Kehoe, 1994; Powell, 1995; Samoson and Terziovski, 1999; Sohal and Terziovski, 2000). Table 9.2 summarises the main findings of key studies on the subject. In this survey, our intent was simply to observe if the TQM/performance association is also perceptible in the Portuguese municipalities' case.

Establishing such a link requires, first of all, measuring performance. As discussed in Chapter 9, performance measurement in the Local Government is almost exclusively limited to the budgetary control. A few measures of productivity and efficiency are being introduced, but efficacy and equity are extremely difficult to assess with rigour and objectivity.

Survey results reveal that municipalities mainly evaluate performance based on the impact of their activities on the quality-of-life of their citizens (see Table 4.19). Competitiveness, on the other hand, is not a major concern when measuring organisational performance. Actually, Portuguese municipalities provide the large majority of the services in a monopolistic situation, feeling little pressure from competitors.

Measures used to evaluate organisational performance	**Number of responses**	**%**
Financial and budgetary condition	66	74.2%
Achievement of the strategic goals	67	75.3%
Quality of the services provided	64	71.9%
Competitiveness	9	10.1%
Impact on citizens' quality-of-life	72	80.1%
Other	1	1.1%
Number of respondents	**89**	

Table 4.19. Types of Measures used to evaluate Organisational Performance

As expected, Table 4.19 shows that most municipalities use financial and budgetary indicators to evaluate their performance. The need to work within the limits of budgets is

crucial to the Portuguese Local Government, where, as explained in Chapter 1, the vast majority of the funds come from transferences from Central Government.

Municipalities equally affirm they put goal attainment and service quality measures at the core of their performance assessment.

Although, this apparent relatively broad use of different indicators does not necessarily guarantee that the municipalities' performance system actually incorporates (and integrates) comprehensive, reliable and objective measurements. This matter will be discussed further in Chapter 9, in particular.

To assess the results TQM initiatives, measures of process excellence and goals achievement dominate (see Table 4.20).

Measures used to evaluate Quality Management progress	**Number of responses**	**%**
Based on quality goals achievement	26	76.5%
Financial performance indicators	11	32.3%
Non-financial performance indicators	6	17.6%
Process Excellence	29	85.3%
Other	4	11.8%
Number of respondents	**34**	

Table 4.20. Types of Measures used to evaluate progress on Quality Management

Financial performance indicators are used by only one-third of the municipalities as indirect indicators of the effect of TQM, and even this number seems somehow exaggerated if we recall that virtually none of them estimates costs of quality (see Table 4.12).

Findings also suggest that municipalities have some difficulties in defining non-financial indicators. When they exist, they mainly come from customer satisfaction measures based on surveys, which begin to be used in some municipalities.

Organisational Performance	Overall		Municipalities implementing Quality Management		Municipalities not implementing Quality Management	
Excellent	2	2.2%	0	0.0%	2	3.7%
Very Good	25	27.8%	17	47.2%	8	14.8%
Good	53	58.9%	18	50.0%	35	64.8%
Fair	9	10.0%	1	2.8%	8	14.8%
Poor	1	1.1%	0	0.0%	1	1.9%
Number of respondents	**90**		**36**		**54**	

Table 4.21. Organisational Performance of Municipalities Implementing and Not Implementing Quality Management

Overall, as Table 4.21 indicates, 80 municipalities out of 90 (i.e. 88.9%) believe their performance is at least good. Over a quarter even consider they perform very well. Furthermore, if we compare the responses given by municipalities that state they are implementing TQM approaches with those that indicate they are not doing so, we observe that the first group tends to outperform the latest one, thus giving a first sign (though questionable) that TQM implementation may be contributing to a superior organisational performance. Indeed, among TQM-municipalities only a tiny minority - 2.8% - report fair or poor performance, whereas among non-TQM municipalities this number raises to 16.7%. The fact of not finding TQM municipalities reporting excellent performance (as opposed to 2 non-TQM institutions which consider they are attaining outstanding results) could look paradoxical at first, but may well denote that municipalities implementing quality management approaches are less inward-looking and have a more realistic view of well they are doing, recognising that no matter how good their performance currently is, they still have a long way to go to achieve OE.

In what concerns Quality performance in particular, the scenario is less optimistic (see Table 4.22), with nearly one-quarter of the municipalities reporting a fair to poor quality performance. As expected, TQM municipalities seem to have a better quality record than non-TQM organisations, though the difference is not very large.

Quality Performance	Overall		Municipalities implementing Quality Management		Municipalities not implementing Quality Management	
Excellent	1	1.1%	0	0.0%	1	1.9%
Very Good	18	20.0%	10	27.8%	8	14.8%
Good	49	54.4%	18	50.0%	31	57.4%
Fair	21	23.3%	8	22.2%	13	24.1%
Poor	1	1.1%	0	0.0%	1	1.9%
Number of respondents	**90**		**36**		**54**	

Table 4.22. Quality Performance of Municipalities Implementing and Not Implementing Quality Management

4.4. CONCLUSION AND RESEARCH IMPLICATIONS

The survey findings show that quality management appeals to many municipalities, which, as mentioned in the Introduction, face the challenge of delivering more and better services to increasingly demanding citizens. This study revealed that 40% of the Portuguese municipalities already implement Quality Management in some form, and, from the remaining 60%, the large majority have plans to implement quality approaches in the near future.

Citizens, increasingly regarded as Local Government customers, were pointed out as the main reason for introducing TQM, followed by concerns with staff satisfaction and motivation. It is particularly interesting to notice that TQM implementation is also regarded as a means to reach major Local Government purposes, such as transparency, citizenship and democracy.

The difficulty in establishing a long-term vision and plan for the future of the municipality, and the lack of expertise and training in quality concepts, methodologies and tools emerged as major impediments to TQM implementation.

Apart from describing the extent of TQM implementation in the Portuguese Local Government, this exploratory study was also important to give credibility to the critical

success factors of Kanji's Business Excellence Model, which, as explained in Chapter 2, is the basis of the Organisational Excellence Model for the Portuguese municipalities.

In fact, KBEM assumes that an organisation has to be guided through TQM principles and core concepts to achieve business excellence (Kanji, 1998). These TQM elements correspond to CSFs that were generally regarded as major drivers of performance in a municipality.

The criticality of leadership, and the apparent difficulty it has in putting into place adequate behaviours and actions to support TQM, deserves to be further investigated. With this purpose, Chapter 7 analyses the leadership role in the Local Government, and describes how a new model was developed, tested and applied to measure Leadership performance in the Portuguese municipalities.

This exploratory study suggests the existence of a positive link between quality and performance in the Portuguese Local Government. However, to validate it, further understand possible relationships, and suggest potential improvement strategies, it is necessary to develop a model that can be empirically tested.

The methodology described in the next chapter allows us to examine how the main TQM principles and core concepts relate to each other and analyse their collective impact on OE.

Besides the significance of this exploratory study to validate the CSFs embedded in KBEM, understanding how the municipalities regard TQM was also important to adapt KBEM (and customise the questionnaire associated with it) to better fit the particularities of the Local Government, in terms of its overall aims, constraints and language.

CHAPTER 5. RESEARCH METHODOLOGY

The main focus of this research is to analyse the key drivers of Organisational Excellence (OE) in the Portuguese municipalities. The specific questions to be addressed within this overall aim were stated in the Introduction. There, an outline of the research design was equally discussed.

Building on previous studies, OE is explained through a set of variables reflecting TQM principles and concepts.

Shortly, a theory describing the relationships among these critical success factors (CSFs) of OE is formulated. Since the CSFs are abstract constructs that cannot be directly observed or measured, they are translated into indicators (or manifest variables). The measurement items are then incorporated into questionnaires used to gather data from different stakeholders regarding their perceptions of the municipalities' performance on the various CSFs. Data thus obtained is used for testing the theory formulated. In the construct validation stage, the correspondence between the theoretical constructs and their empirical indicators is assessed.

Section 5.1 discusses the problems associated with construct validation and explains how the measurement issues were addressed within this research, describing in some detail how variables were selected and appropriate scales developed and tested.

Next, in section 5.2, the essentials of Structural Equation Modelling (SEM) are presented and the selection of this approach justified according to the objectives of this research. The choice for Partial Least Squares (PLS) estimators, is also explained based on the characteristics of the data collected, and the advantages of this method over maximum likelihood estimators. Among the statistical packages available that implement PLS, K&W software (see brief explanation of workings in Appendix E) was used in this research to perform the key stages of the data analysis.

Finally, general considerations about the use of surveys as a primary data collection method are made and some explanations given on the way they were employed in this research.

5.1 CONSTRUCTS AND MEASUREMENT ISSUES

The process of construct development and measurement is at the core of theory building and testing. A construct is a theoretical based concept that acts as a "building block" used to define relationships. Nunally (1967) further points out that "all theories in sciences concern statements mainly about constructs rather than about specific observable variables". Therefore, as concepts, constructs are abstractions that need to be properly operationalised.

The role of valid measurement cannot be overestimated. Moreover, as Bagozzi (1984) stresses, theory and measurement are intimately intertwined, and both should deserve identical attention. In his view, the observational content (i.e. the manifest variables) associated with the theoretical terms (the constructs or latent variables) give them empirical meaning.

The selection of variables as indicators of a construct must have a theoretical foundation. In our case, the scales were pre-specified, based on the theoretical perspectives that guided the construct definition, and then validated against data. As most authors argue (Venkatraman, 1989; Sureshchandar *et al.*, 2001), deriving the dimensions through data analysis techniques such as exploratory factor analysis (EFA) – i.e. following a *theory free* approach – is only preferable when little theoretical basis exists, what is not the case here. Moreover, in pure EFA items are loaded on to a factor only on statistical grounds (Sureshchandar *et al.*, 2001), which may be incongruent with existing theory and affect the factors identity.

Given the decision to develop the constructs and scales *a priori*, the use of confirmatory factor analysis (CFA), which deals with precise specifications concerning the factor-structure and their loadings, is the logical consequence. Therefore, CFA and SEM (described in some detail in the next section) were applied to test and validate the pre-specified scales.

There is no upper limit in terms of the number of indicators to be included in each scale. As a general rule, each construct should me measured by at least two items so that both measurement reliability and construct validity can be assessed (Hulland *et al.*, 1996). Hulland *et al.* (1996) suggests an average of three or more measures per construct. Furthermore, it is generally accepted that the measurement models have difficulties in

estimating over five parameters for a given latent variable (Garver and Mentzer, 1999). When a construct is too complex it may be advisable to consider multiple sub-dimensions that can be represented in a second-order factor model (Hair *et al.,* 1998).

Establishing reliability and validity is essential to ensure that the scales actually measure the concepts they are supposed to represent (Sureshchandar *et al.*, 2001).

Construct validation is therefore a prerequisite for initiating the interpretation process. Advancements in SEM, described in section 5.2, make this statistical approach useful in testing construct validity within a single research study.

Any measure inevitably includes some measurement error, either random or systematic. Both of these measurement error sources potentially affect questionnaires and therefore have to be taken into consideration in this research. Systematic error refers to the error that is directional or constant in nature, which arises, for example, when an important variable is omitted; whereas random measurement error is non-systematic, such as when respondents are not consistent in their answers to survey questions from one point in time to another (Grapentine, 2000). Measurement errors can seriously jeopardise the validity of the research findings, by attenuating the observed relationships among variables, inducing errors in inference or inflating parameter estimates (Bagozzi and Philips, 1991). Therefore, it is crucial to validate measures and unravel the distorting influences of these errors before theory testing.

Construct measurement not only includes the validation of the scales, but also the generalisation of results across different conditions of measurement. Unless a systematic basis for evaluating the adequacy of measurements exists, confidence in the research results will be low and the managerial implications derived from such results questionable (Venkatraman, 1989).

To assess the degree of correspondence between constructs and their measures, the field of Psychometry proposes a set of criteria against which measures can be evaluated (see Table 5.1).

Table 5.1. Components of construct validity

(Adapted from Venkatraman and Grant, 1986)

Construct validity is defined as "the degree to which a scale measures what it intends to measure" (Garver and Mentzer, 1999) and can be analysed from different (but complementary) perspectives.

Once the conceptual domain is defined, the process of operationalising the construct begins. That corresponds to what Venkatraman (1989) calls the definition of the analytical domain. The main concern is to ensure adequate coverage of the domain of each concept (content validity). The assessment of content validity is hence a function of the adequacy of the items included to reflect the domain of the construct (Venkatraman and Grant, 1986). The evidence of content validity is purely subjective and logical rather than statistical. If the items (or manifest variables) representing each construct are substantiated by a comprehensive review of the literature, content validity can be ensured (Sureshchandar, 2000). Content validity can also be enhanced through review by experts in the field. Some authors refer to a rudimentary form of validation – so-called face

validity – which reflects the extent to which the scale items are meaningful and appear to represent the construct in question (Robledo, 2001). It calls for a common sense evaluation that can be seen as part of the process of establishing content validity.

It must be noticed that content validity is a key component of construct validity. As Garver and Mentzer (1999) emphasise, if a measurement scale does not possess content validity, it cannot possess construct validity no matter what the statistical analysis indicates.

In our case, the lists of indicators generated based on the literature were reviewed by a small group of people working closely with the Local Government, who also checked the wording of the questions to ensure they were easily understood by the respondents, and subsequently, whenever possible, the list of statements was tested with a small set of data. Through this process some items were dropped or rearranged.

Convergent validity is an assessment of the consistency in measurements across multiple operationalisations (different attempts to measure the same construct should be in agreement), while discriminant validity refers to the degree to which measures of different dimensions are unique from each other and is demonstrated when a measure does not correlate very highly with another measure from which it should differ (Venkatraman, 1989). Discriminant-validity analysis shows the extent to which a scale is new and not just a reflex of other variables (Hulland, 1999; Robledo, 2001).

The significance of factor loadings provides an indication of convergent validity, together with the overall fit of the model, and the magnitude, direction, and significance of estimated parameters between latent constructs and their indicators (Garver and Mentzer, 1999). Convergent validity is also sometimes checked using the Bentler-Bonett coefficient (Ahire *et al.*, 1996).

Additional signs are given by the correlation between the scales. When a measure correlates well with other measures that are believed to measure the same construct, evidence for convergent validity is obtained. Weak correlations between measures that are theoretically distinct demonstrate discriminant validity (Sureshchandar *et al.*, 2001). Scales can also be tested for discriminant validity using a chi-square difference test. Moreover, a more sophisticated measure was developed by Fornell and Larcker in 1981, who suggest the use of the Average Variance Extracted as an indication of discriminant validity (Hulland, 1999). Accordingly, the average variance shared between a construct and its

measures should be greater than the variance shared between the construct and other constructs in the model (i.e. the squared correlation between two constructs).

Correlations and alpha coefficients were used in this research as indirect indicators of convergent validity, since they reflect the degree of cohesiveness among the scale items.

Nomological validity refers to the degree to which predictions from a theoretical network are confirmed. It can be assessed by looking at the correlations of constructs to other constructs that they should predict (Garver and Mentzer, 1999). In the present context, nomological validity is established by correlating the scales scores for the different TQM dimensions with OE (the outcome construct).

Internal consistency embraces the requirements of unidimensionality and reliability. Low internal consistency can result from a variety of underlying causes, including poor construct definition and/or construct multidimensionality (Hulland, 1999).

Assessing unidimensionality ensures that all the items measure the (unique) theoretical construct under study. Measures such as the Comparative Fit Index are usually used to examine unidimensionality (Sureschandar *et al.*, 2001).

The reliability of a measure determines its ability to yield consistent results (Garver and Mentzer, 1999) and is therefore an indication of the degree to which measures are free from random error. It can be viewed as the proportion of variance attributable to the underlying trait (Venkatraman, 1989).

Since internal consistency refers to the homogeneity of the items in a particular scale, broadly defined constructs usually have more difficulties in achieving high reliability scores than constructs with a narrow content. Internal consistency is often estimated using a coefficient called Cronbach's alpha.

Coefficient alpha scores are obtained by splitting a scale in half and correlating these items with the remaining half items that are expected to measure the same latent variable. The final coefficient alpha is calculated by running all split half possibilities (Garver and Mentzer, 1999). It is usually regarded as a general and effective method with the key advantage of requiring a single administration of the measurement instrument. Despite the lack of a complete agreement on what constitutes an acceptable score, an alpha value of

0.7 or above is considered to be a strong enough indication of internal consistency (Nunnally, 1967), with 0.6 being acceptable for new scales (Shin *et al.*, 2000). The alpha-coefficient has however some limitations, namely the fact that it assumes that all items in a scale have equal reliabilities (Garver and Mentzer, 1999), and should be complemented with other measures, such as the R^2.

The particular procedures to check the measurement properties of the constructs (and of a model as a whole) depend on the statistical approach followed and the distributional assumptions associated with it. For the reasons described in the next section, not all the tests mentioned above are applicable when PLS are used.

The choice of measures is a critical component of research design when employing a survey. It became clear in this section that the subject of assessing validity and reliability of a measurement instrument is a complex one and often absolute and definitive answers cannot be found. Different procedures to assess construct validity are based on distinct assumptions and no clear standards can be found in the literature to interpret the results.

The problem is surely simplified if a study employs scales that have been extensively tested in previous research works, but even in those cases the quality (and appropriateness) of the scales in the specific context under investigation should be analysed. In this research, in the measurement of OE from the internal stakeholders perspective KBEM was used and the scales employed in previous research studies carefully reviewed (Tambi, 2000; Lan, 2000). However, KBEM application to the Portuguese municipalities imposed some changes and adjustments in the scales proposed earlier. In other instances, such as the leadership excellence model (which expands the leadership concept embedded in KBEM) and the business scorecard (used to assess OE from the external stakeholders perspective), completely new scales were developed.

Even if our results (see Chapters 6, 7, and 8, respectively) strongly suggest that the measures employed exhibit good psychometric properties and the scales proposed are valid and reliable, future studies are important to further validate (and potentially improve) them.

5.2. STRUCTURAL EQUATION MODELLING

In this research, Structural Equation Modelling (SEM) is used to test the postulated causal relationships that form Kanji's Business Excellence Model (KBEM), Kanji's Business Scorecard (KBS) and the Leadership Excellence Model. As Garver and Mentzer (1999) point out, this statistical approach is useful for testing construct validity within a single research study such is the case here.

This section describes the fundamentals of the SEM approach, its main stages and the estimation methods associated with it. At the end, some relevant applications in the fields of quality management and business excellence are presented.

5.2.1. Structural Equation Modelling: Fundamentals

Structural equation models are the result of independent research traditions in psychiatry, econometrics and biometrics (Everitt and Dunn, 2001).

Afterwards, Structural Equation Modelling (SEM) has been gaining reputation among many disciplines given its particular ability to simultaneously explain the pattern of a series of inter-related dependence relationships between a set of latent constructs, each measured by one or more manifest variables.

In fact, many research questions involve relationships among abstract concepts (latent constructs) that cannot be directly observed, but rather need to be translated into a set of indicators (manifest variables). Section 5.1 discussed in greater detail the measurement problems associated with the development of appropriate scales and section 5.3 returns to the issue in the context of the measurement instruments (questionnaires) used in this research.

In fields such as psychology and sociology that still seek to achieve some kind of unifying theories, the possibility offered by structural analysis of analysing relationships among variables using correlational data is appealing (Everitt and Dunn, 2001).

Causal modelling essentially is a general approach for integrating the theory construction phase of research with the empirical hypothesis testing stages (Hulland *et al.*, 1996). It thus offers a more flexible interplay between theory and data (Fornell *et al.*, 1990). As Hughes

et al. (1986) note, although theoretical considerations must guide model development, empirical relationships that emerge from data analysis can (and should) be used to suggest modifications, providing that they are theoretically justifiable.

A critical assumption underlying the use of regression analysis when calculating path coefficients is the absence of random measurement error (Grapentine, 2000). SEM, on the other hand, provides important advantages over other multivariate techniques (Everitt and Dunn, 2001; Fornell and Larcker, 1981; Garver and Mentzer, 1999; Hair *et al.*, 1998), such as:

(1) the ability to directly incorporate measurement error in the estimation process;
(2) the simultaneous estimation of several interrelated dependence relationships, and
(3) the opportunity to not only combine theory and data, but also confront theory with data.

Consequently, causal models provide researchers with several key benefits (Hulland, 1999):

- they make the assumptions, constructs, and hypothesised relationships in a theory explicit;
- they permit a more complete representation of complex theories;
- they add a degree of precision to a theory, since they require clear definitions of constructs, operationalisations, and functional relationships;
- they provide a framework for constructing and testing both theories and measures;
- by accounting for random measurement error, structural equation modelling produces more reliable coefficient estimates.

As Aaker and Bagozzi (1979) state, SEM is thus a powerful statistical approach in that it combines the measurement model (which specifies how the latent variables are measured in terms of the observed variables) and the structural equation model (i.e., the hypothesised causal relationships among the unobserved theoretical constructs) into a simultaneous statistical analysis. By doing that, the quality of statistical inferences about relationships among the underlying constructs is improved, since it is at the same time ensured that those constructs are adequately represented by their sets of indicators (Hughes *et al.*, 1986).

The process of specifying a measurement model is similar to that of establishing a regression equation, where the latent variable is specified as the independent variable and the indicators act as dependent variables (Garver and Mentzer, 1999). The constructs involved can be purely independent, purely dependent, or intervening variables (Hulland *et al.*, 1996). Baggozzi (1984), Bontis (1998) and Johansson and Yip (1994) also make a distinction between reflective and formative indicators. In the first case, which we embrace here, measures are believed to reflect the unobserved, underlying construct, with the construct giving rise to (or 'causing') the observed measures, whereas, in the later case, indicators define (or 'cause') the construct. Therefore, according to our research perspective, the purpose of the measurement model is "to describe how well the observed indicators serve as a measurement instrument for the latent variables" (Garver and Mentzer, 1999).

In this primary form of analysis, SEM is similar to combining multiple regression and factor analysis (Resinger and Turner, 1999). Structural equation models include one or more linear regression equations that describe how the endogenous constructs depend upon the exogenous constructs. Their coefficients are called path coefficients, or sometimes regression weights. Additionally, SEM is a factor analysis technique used for confirmatory factor analysis[5], since the structure and number of factors is constrained or defined *a priori* and SEM measures how the observed variables are loaded on particular constructs. Accordingly, SEM is not a method for discovering causative relationships, but rather a means by which theoretical relationships can be tested. In this research, we assess the extent to which the proposed organisational excellence models are consistent with the empirical data.

The strengths of SEM are even more attractive to the broad field of behavioural sciences, where some degree of data fallibility is inevitable and where the researcher is often confronted with the need to investigate the effects of constructs propagated across multiple layers of variables via direct, indirect, or bi-directional paths of influence (Baumgartner and Homburg, 1996).

[5] In contrast, exploratory factor analysis puts no constraints on which of the manifest variables are related to which of the latent variables (Everitt and Dunn, 2001) and aims to find a good representation of all the variables in a small number of factors that account for a large proportion of the covariation among the observed variables. These factors correspond to "underlying dimensions" in the data that emerge in the analysis and which have then to the interpreted and labelled (Hair *et al.*, 1998). It is therefore designed for situations where the relationships between the observed and the latent variables are not possible to specify.

Moreover, the recent development of increasingly sophisticated and user-friendly packages contributes to the proliferation of research studies using this approach.

SEM traditionally has some assumptions (Reisinger and Turner, 1999), namely:

(1) independence of variables;
(2) random sampling of respondents;
(3) linearity of all relationships;
(4) multivariate normality of distribution;
(5) no kurtosis and no skewness;
(6) appropriate data measurement on interval or ratio scale; and
(7) sample size between 100 and 400.

However, the relative importance of meeting these conditions depends also on the estimation methods used. Some estimation methods can adjust for the violation of some of these assumptions. As explained later, PLS copes well with some departures from the usual assumptions (and normality in particular), whereas other popular tools, such as LISREL, are particularly sensitive to distributional characteristics of the data.

The confirmatory factor analysis character of SEM explains why it must be theoretically driven, meaning that the proposed relationships must have a theoretical foundation and involve reasonable arguments. Furthermore, the variables that define each construct need to be specified. For each dimension of the organisational excellence model a set of indicators was developed and incorporated into a measurement instrument.

As Hulland (1999) stresses, the causal modelling process begins at the conceptual level. Therefore, the first step in using SEM is the development of a theoretical model with the linkages between latent constructs and their measurable variables reflecting the proposed hypotheses. The stages involved in the application of SEM are depicted in Figure 5.1 and discussed in some detail next.

5.2.2. Stages in Structural Equation Modelling

The process – described in Hair *et al.* (1998), Reisinger and Tuner (1999) and pictured in Figure 5.1 – starts with the definition of the theoretical model, stating the proposed relationships between the theory blocks, i.e. the concepts (or latent variables).

Figure 5.1. Structural equation modelling stages

(Based on Hair *et al.* (1998, pp. 592-616))

In the model conceptualisation phase, it is also necessary to develop a set of indicators (or manifest variables) covering each concept domain, i.e. to design the measurement model. Excessive complexity must be avoided. As highlighted by Baumgartner and Homburg (1996), structural equation models produce better results on "relatively well-defined

theoretical frameworks of moderate complexity in which each construct is measured by a fairly compact set of indicators". Theory, as highlighted by Hair *et al.* (1998), provides the rationale for almost all aspects of SEM.

Stage 2 involves the construction of a path diagram, where the causal relationships between constructs and their indicators are graphically represented. Path diagrams may include latent and observed variables, as it happens in this research. Conventionally, latent variables are represented in ovals, while observed variables are enclosed in boxes.

When path analysis was initiated by Sewall Wright in the 1930s, he distinguished between direct and indirect effects, the later being the ones where the effect of one variable on another is mediated by at least one other variable in the system (Everitt and Dunn, 2001). In KBEM, for example, the impact of leadership on business excellence is mediated by the extent to which a set of TQM principles and core concepts are adopted.

Structural equation modelling is based on causal relationships. There are four main criteria to be met so that causal assertions can be made (Hair *et al.*, 1998): (1) sufficient association between the two variables; (2) temporal antecedent of the cause versus the effect; (3) lack of alternative causal variables; and (4) a theoretical basis for the relationship. However, it must be highlighted that the ultimate demonstration of causality requires the active and absolute control of the variables involved, what is clearly not possible in social sciences (Everitt and Dunn, 2001).

The organisational excellence models tested in this research suggest causal links between constructs. Some of these constructs, such as leadership in KBEM and organisational values in KBS, are exogenous variables that are independent and not predicted by any other variable in the model, whereas other constructs are endogenous, meaning that they are caused by other variables in the model.

Model specification (stage 3) involves the description, in mathematical terms, of the nature and number of parameters to be estimated. The path diagram is translated into a series of linear equations. The system of simultaneous equations can, in simple terms, be expressed as (Tambi, 2000):

$$\underline{\eta}^* = \underline{A}\,\underline{\eta}^* + \underline{\tau}^*\underline{\xi}^*$$

where,

$\underline{\eta}^* = [\underline{\eta}', \underline{y}']$	with $\underline{\eta}'$being the transposed vector of latent variables and $\underline{y}'$being the transposed vector of manifest dependent variables
$\underline{A}$	is the matrix of path coefficients that relates pairs of dependent variables
$\underline{\tau}^*$	is the matrix of path coefficients that relate independent to dependent variables
and $\underline{\xi}^* = [\underline{\xi}', \underline{\varepsilon}']$	with $\underline{\xi}'$being the transposed vector of latent exogenous variables and $\underline{\varepsilon}'$being the transposed vector of disturbance variables

There are therefore two types of path coefficients: those associated with relationships linking manifest variables to latent variables – outer coefficients – and those associated with latent to latent variables – inner coefficients.

The selection of the variables to be included in the model is probably the most critical decision, since the omission of one or more predictive variables creates a specification error, which leads to bias in assessing the importance of other variables.

In stage 4, a choice is made concerning the input data matrix. A particular characteristic of SEM is that it uses exclusively the variance-covariance or correlation matrix as the input. This happens because what really matters in SEM is the pattern of relationships across respondents, rather than individual observations (Hair *et al.*, 1998). According to Reisinger and Turner (1999), the correlation matrix is widely used since it allows for direct comparisons of the coefficients within the model. On the other hand, the covariance matrix has the advantage of providing valid comparisons between different populations or samples (Hair *et al.*, 1998). The most common way of calculating correlations or covariances between manifest variables is the Pearson product-moment correlation.

Stage 5 assesses whether or not the information provided by the data is sufficient to enable parameter estimation. A model is said to be identified if it is impossible for two distinct sets of parameters values to yield the same population variance-covariance matrix (Baumgartner and Homburg, 1996). As noted by Krause *et al.* (2000), a necessary

condition for the identification is that the number of independent parameters is less than or equal to the number of elements of the sample matrix of covariances among the observed variables.

Before estimating and testing the model, it is also important to carry out some data screening procedures. First, there is a need to check if there are coding errors and deal properly with missing values[6]. Next, the presence of outliers must be investigated, since their presence can have distorting influences.

Additionally, it is recommended to assess the normality of the data, as some estimation methods assume it and, in such cases, the violation of this assumption can adversely affect goodness-of-fit indices and standard errors.

There are, in fact, several methods for parameter estimation. The sensitivity of maximum likelihood estimates (MLE) to non-normality created the need for alternative estimation techniques, such as weighted least squares, generalised least squares and asymptotically distribution free (ADF) methods (Hair *et al.*, 1998). One of these alternative methods – Partial Least Squares (PLS) – was employed in this research (see section 5.2.3).

PLS is the most appropriate method when the sample is relatively small, assumptions of multivariate normality cannot be made, and when the researcher is primarily concerned with prediction of the dependent variable (Birkinshaw *et al.*, 1995). Asymptotically distribution-free (ADF) methods, on the other hand, require in practice large sample sizes (Baumgartner and Homburg, 1996). Furthermore, the use of PLS is especially recommended in situations where variables are highly interdependent (Nielsen and Høst, 2000), as it was expected in our case given the holistic nature of TQM.

Following the confirmation that the relevant assumptions of SEM (under the particular estimation method used) are met, stage 6 involves the assessment of the model fit. Results must first be examined for offending estimates which are coefficients that exceed acceptable limits. Reisinger and Turner (1999) point out three common examples: (1) negative error-variances or non-significant error variances for any construct; (2)

[6] As a matter of fact, many estimation procedures only work with cases for each a full set of measures is available. A possible way of dealing with randomly occurring missing data is the substitution for the mean value of similar items measured on the same individual (Hulland *et al.*, 1996).

standardised coefficients exceeding or very close to 1.0; and (3) very large standard errors associated with any estimated coefficient.

Model fit needs to be assessed for both the measurement and the structural model. Essentially, there are three types of goodness of fit measures (Yoon *et al.,* 2001): (1) absolute fit measures (which assess how well the *a priori* model reproduces the sample data); (2) incremental fit measures (which compare the proposed model with a more restricted, nested baseline reference model); and (3) parsimonious fit measures (which determine the model fit in comparison to models of differing complexity).

Absolute fit measures, such as Chi-square and goodness of fit index (GFI), provide information on the extent to which the model as a whole provides an acceptable fit to the data, but do not fully express its the quality (Reisinger and Turner, 1999). The χ^2 statistic, which tests the null hypothesis that the estimated variance-covariance matrix deviates from the sample variance-covariance matrix, is very popular, but is not robust to violations of assumptions (such as normality) and is heavily influenced by sample size (Ahire and Dreyfus, 2000). Therefore, especially when the estimation methods employed require normality, absolute measures should be complemented with incremental – e.g. normed fit index (NFI) – and parsimonious fit indices – e.g. the normed Chi-square or the adjusted for the degrees of freedom goodness-of-fit index (AGFI) .

The fit of the measurement model is judged based on how well the indicators measure the latent construct and the amount of variance accounted for by the constructs. The total coefficient of determination (R^2) is one of the signals. In the PLS case, since the estimation procedures is based on the minimisation of error in all endogenous constructs (and not on the reproduction of the observed covariance matrix, as in LISREL) (Hulland, 1999), the R^2 values for the dependent constructs are particularly relevant in assessing the model goodness-of-fit. On the other hand, for the reasons just mentioned, measures of fit based on the replication of the covariance/correlation matrix do not apply to PLS estimations.

It is also recommended to examine the indicators' loadings in each construct (outer coefficients) and analyse the correlations among the constructs. Thus, sign, size, significance of estimated factor loadings, and magnitude of measurement error must be observed. Standard errors further show how accurately the values of the parameters are

estimated. As illustrated in subsequent chapters, some of these methods, along with the coefficient of reliability (Cronbach's alpha), were applied in this study.

Based on model fit results, it is important to consider possible ways of changing the model so that it provides a better fit for the data. These modifications mainly concern the elimination or addition of parameters. Alternative models are usually compared using differences in Chi-squares. However, all changes must be guided by theory. Achieving a good fit at all costs is not always recommended because a good fit for a model may theoretically be inappropriate (Reisinger and Turner, 1999).

Finally, stage 8 suggests cross-validation of the model by testing it with a new data set. Cross-validation can be broadly defined as the estimation of the same model on at least two sets of data. A possible (even if rudimentary) way of doing it is by dividing the sample into two pairs if the size is large enough to conduct the analysis (Jonge *et al.*, 2001). Cross-validation is important to enhance replicability of findings (Baumgarten and Homburg, 1996) and further studies with that purpose are strongly encouraged.

5.2.3. Estimation Procedures and Software Packages for Structural Equation Modelling

There are several statistical software packages to deal with Structural Equation Models. In this research, a specific software - K&W - was employed, which is essentially based on the PLS estimation method (a summary description of K&W characteristics is provided in Appendix E). Other alternatives include LISREL, EQS and AMOS. Essentially, all of them address the same issues, although they perform slightly different functions and use different methods for parameter estimation and fit indices.

The path coefficients obtained with K&W are standardised regression coefficients while the items loadings in individual constructs are factor loadings. Therefore, latent variable scores created using these loadings are equivalent to weighted composite indices.

PLS is ideally suited to the early stages of theory building and testing, and it has been used by a growing number of researchers in a variety of disciplines (Birkinshaw *et al.*, 1995).

It permits multiple measures of both dependent and independent variables, as we propose in this research. In addition, PLS provides other advantages over regression (Birkinshaw *et al.*, 1995):

(1) it considers all path coefficients simultaneously to allow the analysis of direct, indirect, and spurious relationships; and
(2) it estimates the individual item weightings in the context of the theoretical model rather than in isolation.

Moreover, as noted by Hackl and Westlund (2000b), problems of multicollinearity, skewness and misspecification are not unusual when estimating Structural Equation Models in social sciences. PLS is a rather robust estimation approach (Bontis, 1998). which makes estimation results depend much less on distributional assumptions (Cassel and Hackl, 2000; Hackl and Westlund, 2000a).

The superiority of PLS to deal with these problems, along with the possibility it offers of aggregating and comparing measurements, justifies its formal adoption in the determination of the American Customer Satisfaction Index (ACSI) and European Customer Satisfaction Index (ECSI) (Cassel and Hackl, 2000; Kristensen *et al.*, 2000).

Contrary to other software packages, such as LISREL and EQS, PLS does not estimate parameters by attempting to reproduce the covariance matrix defined by the individual construct measures. As Hackl and Westlund (2000b) note, "the PLS algorithms are iterative procedures that generate estimates of the observations of the latent variables so that they fit into the structure of the latent variables and into the measurement system".

Furthermore, as mentioned earlier in this chapter, PLS enables the analysis of small data samples (Cassel and Hackl, 2000; Johansson and Yip, 1994) without the need to make assumptions of normality. In these circumstances, maximum likelihood methods tend to produce unstable results and generate low model χ^2, leading researchers to accept otherwise poor models (Hulland *et al.*, 1996) .On the other hand, PLS estimations are robust, i.e. exhibit good statistical properties "even if preconditions are complicated e.g. misspecified measurement models, extremely skew response distributions, measurement errors, etc" (Cassel and Hackl, 2000).

PLS performs well with samples as small as ten times the largest of the following (Bontis, 1998; Gorst, 2000):

(1) the number of indicators on the most formative construct;
(2) the maximum number of antecedents constructs leading to an endogenous construct.

There are no formative indicators in this research, so it is the second requirement that must be met. Another rule of thumb indicates that samples should be at least five times the number of manifest variables involved (Hulland *et al.*, 1996). There are no definitive rules to decide on sample size, even though a larger sample usually leads to more accurate estimations and higher reliability scores.

As in any other estimation method, there are shortcomings associated with PLS (Gorst, 2000). Since it does not use a maximum likelihood procedure, the asymptotical properties are unknown, and therefore standard errors and goodness of fit measures cannot be computed. Moreover, PLS is based on linear models and ignores all non-linear relationships.

All these aspects considered, given the relatively small size of the data sets involved in our research and the likely departures from normality, the use of PLS emerged as the best option.

5.2.4. Structural Equation Modelling: Relevant Applications

Most Structural Equation Modelling (SEM) applications deal with research problems related to the study of causal relationships among latent variables. As Hackl and Westlund (2000b) point out, the use of structural equation measurement models provides an adequate answer to the requirements of validity and operationality.

With the aim of testing relationships among criteria that form the Business Excellence Models some researchers have recently started to apply the SEM approach. As emphasised in Chapter 2, the EFQM/BEM is based on the premise that the adequate management of the enabling criteria will lead to excellent results. However, there is no knowledge about the relationships between the enabler criteria and the results. Mainly, there is a tendency to

accept the underlying premises of business excellence models based on case and anecdotal evidence (Curkovic *et al.*, 2001). SEM is particularly suitable to investigate this subject.

Eskildsen and Dahlgaard (2000) used this approach to empirically test the relationship between the enabler criteria of the EFQM model and "People Results". Their findings indicate that enablers from the EFQM/BEM have a positive effect on the criterion "people results".

A more comprehensive test of the relationships embedded in the Baldrige National Quality Award Model was conducted by Curkovic *et al.* (2000). Their research was guided by two main questions: (1) Does the MBNQA adequately capture the major dimensions of Total Quality Management?; and (2) Is there a good fit between the factors of the MBNQA and their measures?. Using the automotive industry as a reference, their assessment of the MBNQA was carried out using CFA and SEM. The study operationalised the MBNQA in terms of four major constructs, each of them represented in a questionnaire by a number of metrics consistent with the MBNQA criteria. The results reported showed that the measures do indeed load on the appropriate constructs, therefore indicating that the metrics suggested by the MBNQA are appropriate.

Other relevant applications of SEM are to be found in national customer satisfaction indexes, such as the American Customer Satisfaction Index (ACSI) and the European Customer Satisfaction Index (ECSI) (Cassel and Hackl, 2000).

Over recent years, path analysis was also used to analyse the impact of different quality efforts on productivity, work quality and other organisational performance outcomes in a variety of other studies (Agus and Sagir, 2001; Bart *et al.*, 2001; Eskildsen *et al.*, 1999; Nielsen and Høst, 2000; Noronha, 1999; Shin *et. al.*, 2000).

5.3. THE SURVEY METHOD AND MEASUREMENT INSTRUMENTS FOR ORGANISATIONAL EXCELLENCE

In order to validate empirically the models proposed in this research to analyse and measure the drivers of Organisational Excellence in the Portuguese municipalities, two surveys were conducted: one of them targeted to the measurement of internal stakeholders' perceptions on OE (including the in-depth study of the leadership dimension) and another

aimed at capturing the views of citizens, and thus conducting an external assessment of OE.

The measured (manifest) variables were gathered from respondents through questionnaires specially designed for this research. The measurement items for the various constructs derived from a comprehensive literature review, including the examination of scales used in previous studies. Respondents' perceptions are represented by their numeric responses in a 1 (very little) to 10 (very much) rating scale

Details of each questionnaire used in this research – the exploratory survey, the KBEM questionnaire and the KBS measurement instrument – are given in the chapters dedicated to the corresponding data analysis (i.e. Chapters 4, 6, and 8) and shown in Appendix. In this section, more general considerations are presented regarding the way the survey method was employed and the issues involved in designing and administering the questionnaires.

As defined by Fink (1995, p.1), "(a) survey is a system for collecting information to describe, compare, or explain knowledge, attitudes and behaviour. Surveys involve setting objectives for information collection, design research, preparing a reliable and valid collection instrument, administering and scoring the instrument, analysing the data, and reporting the results". Thus, the complete preparation and analysis of a survey involves the tasks summarised in Table 5.2.

Table 5.2. Checklist of typical survey tasks

Adapted from Fink (1995, p. 78-79)

The term questionnaire is generally used to include all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order (Saunders *et al.*, 2000).

Questionnaire surveys have been widely acknowledged as efficient tools for assessing the perceptions of individuals and organisations on a particular subject (Sureshchandar *et al.*, 2001), especially when there is a need for collecting a large amount of data within a relatively short period of time.

This does not mean, however, that the weaknesses of this instrument were ignored. As stated by Williams (1997, p.105), "the central issue in social research for the critics of questionnaires is a hermeneutic one: (...) How can survey researchers guarantee that their questions will be interpreted by the respondent in the manner in which they intended when there is no opportunity for a participatory dialogue in order to reach understanding?".

These limitations can be, to some extent, minimised through a careful design, since, as Johansson and Yip (1994) note, the most usual problems come from a misunderstanding of the meaning of the concepts covered and a tendency to follow systematic response patterns.

The subjects of reliability and validity were previously discussed with reference to the development and operationalisation of constructs. However, their meaning can be extended to embrace other aspects of the research.

Reliability comprises two main issues. One refers to the stability of the measurement over time (test-retest reliability); the other is concerned with the internal consistency of the measures used (Klime, 2000). Since the later aspect was already treated in some detail in section 5.1, let us now focus on the former.

Test-retest reliability involves the administration of the measurement instrument to the same group of subjects on two occasions (Klime, 2000). Some reasons explain why test-retest reliability is not perfect. One possibility is that real changes have occurred during the time gap that separates the measurements. However, a different mood of the respondent, anxiety or stress may also have an impact. Other alternative methods are the use of equivalent forms and split-halves. In practice, however, applications of methods that involve more than one administration are not always feasible, especially due to time and

cost constraints. For these motives, re-test was not possible in this research.

In addition to reliability, validity must be ensured. "A valid question will enable accurate data to be collected while one which is reliable will mean that these data are collected consistently" (Saunders *et al.*, 2000, p.290). In fact, validity can de defined as "the extent to which the research findings accurately represent what is really happening in the situation" (Hussey and Hussey, 1997). An even wider view of validity is that often designated by external validity, meaning the degree to which the research findings can be generalised to the broader population (Garver and Mentzer, 1999).

Several problems can undermine validity, namely faulty research procedures, poor samples and inaccurate or misleading measurement.

In order to increase validity, it is important to ensure that the items in the questionnaires have a clear meaning to the respondents and that the overall organisation/structure of the questionnaire is adequate. With that purpose, all questionnaires used in this research were pilot-tested using a small number of potential respondents. The instruments were refined based on the pilot study and on the comments and suggestions of experts to enhance the readability, clarity, and comprehensiveness of the questionnaires.

In any case, it is important to recognise that there is little control over the way in which a respondent completes the questionnaire. Good practice therefore suggests keeping the layout, instructions and questions simple, clear and unambiguous.

Regardless of proper design, it must be acknowledged that mail surveys, such as the ones used in this research, do not permit to capture important feedback that comes from 'body language', voice, intonation and unsolicited comments (Bennington and Cummane, 1998).

As Wilson (1996) points out, the use of a highly structured method, such as the mail questionnaire, does not allow the freer exploration of respondents' meanings and beliefs, but, on the other hand, has some advantages in terms of reliability.

Even if it is clear that the survey method puts some restrictions in the number of questions to be asked and depth of some of the information to be collected, it was believed that self-administered questionnaires could be used under these circumstances to obtain valid and

reliable data to test and validate the organisational excellence models developed in this research.

As mentioned earlier, to minimise the measurement error it is important to build an instrument that is easily understood by the respondents and administer it properly.

A concern when using a survey instrument relates to the possibility of having a social bias (Boyer and Pagell, 2000). In our case, that means, for instance, that respondents may tend to rate high the importance and level of implementation of each CSF proposed because they expect that to be the most socially acceptable answer and want to transmit a good image of the municipalities they represent/work for.

In spite of all the potential deficiencies associated with questionnaire surveys, the application of the SEM methodology, as described in the previous section, actually reduces some of their possible counterproductive effects, by essentially taking into account the correlation/covariance matrix. As Johansson and Yip (1994) argue, even if the mean levels of some variables may be distorted, there is often less reason to distrust the derived correlations between the variables.

A final word for the scales used in this research. Most studies in the field of behavioural and management sciences use interval scales. The argument is given by Nunnally (1967) who states that equal intervals in interval scales allow mathematical analysis of test scores to be performed leading to meaningful and replicable results. In this research, the manifest variables are measured in 10-point scale. Gorst (2000) summarises the benefits of using this scale, highlighting that 10-point scales stop people from choosing the middle values and makes them lean slightly in favour or against a given subject. Additionally, by creating enough variation in the data (Cassel and Hackl, 2000), 10-point scales reduce the sample requirements associated with 5-point scales and provide greater opportunities of detecting changes in the scores achieved for each construct (or CSF).

The actual processes of questionnaire administration and data gathering for the test and validation of KBEM, KBS and Leadership Models are described in some detail in the corresponding chapters.

CHAPTER 6. ORGANISATIONAL EXCELLENCE MODEL FOR THE PORTUGUESE MUNICIPALITIES

Having identified the Critical Success Factors (CSFs) for Organisational Excellence (see Chapter 2) and analysed the main drivers and barriers for TQM implementation in the Public Sector in general and in the Local Government in particular (see Chapter 3), the main challenge in this chapter is that of examining the relationships among the different determinants of Organisational Excellence (OE) in the Portuguese municipalities.

As discussed in some detail in section 2.3.2, Kanji's Business Excellence Model (KBEM) adequately covers the CSFs that potentially lead to OE, and that essentially refer to a set of TQM concepts and practices. Furthermore, KBEM is a structural model that simultaneously incorporates conceptual and measurement elements. Therefore, as explained in the previous chapter, it can benefit from the advantages of the SEM methodology in terms of its estimation accuracy and its ability to proportionate an interaction between theory and data.

KBEM has been tested and validated in a variety of contexts, including those of education (Tambi, 2000) and retail banking (Lan, 2000). Since it is a general model, there is no reason to believe that it is not applicable to the Local Government context. Chapter 3 supports this view and the exploratory study conducted in the Portuguese municipalities (described in Chapter 4) gives further evidence of the validity of the model constructs. However, previous analysis of TQM in the Public Sector also drew attention to the need to interpret with care its principles and core concepts. Section 6.1 addresses this concern.

To reflect the particularities of the Portuguese Local Government, the measurement instrument (i.e. the OE questionnaire) associated with KBEM had to be carefully customised. Section 6.2 describes the main methodological issues related to the process of model validation and testing.

Data collected from the Portuguese municipalities was comprehensively analysed. Section 6.3 presents the results obtained. The measurement properties of KBEM were checked and the model then used to measure the Excellence of the Portuguese municipalities.

Based on the scores achieved for each CSF, section 6.4 discusses possible improvement strategies and assesses the potentialities demonstrated by KBEM in the measurement of OE in the Local Government.

6.1. KBEM PRINCIPLES AND CORE CONCEPTS IN THE LOCAL GOVERNMENT

The exploratory study conducted in the Portuguese municipalities validated the CSFs embedded in KBEM and encouraged Local Government leaders to suggest others. Given the inclusion of supplier involvement as a key factor in many research studies (Schonberger, 1992), this variable was specifically tested. It was found that most municipalities still do not regard supplier involvement as vital. Some explanations related to the difficulty in the Public Sector of developing partnerships with suppliers were advanced (see chapter 4).

The acceptance of the KBEM constructs as universal principles does not mean, however, that contingency factors are irrelevant. Though we believe that the KBEM dimensions (presented in Section 2.3.2) are generic, they need to be interpreted and customised to fit the specific Local Government context – its values, environment, and stakeholders.

Leadership

Leadership is consistently proposed as the main driver of quality management implementation in any organisation (Adebajo and Kehoe, 1998; Ahire *et al.*, 1996; Anderson *et al.*, 1994a, 1994b; Dale *et al.*, 1997; Flynn *et al.*, 1994; Grant *et al.*, 1994; Salegna and Fazel, 2000; Saraph *et al.*, 1989). Without the leader's commitment and personal involvement it is very difficult to sustain the quality efforts. Due to the importance of this construct, the next chapter analyses in detail the leadership component within the context of OE in the Portuguese municipalities.

Shortly, municipal leaders are expected to:

- develop and promote quality values throughout the municipality;
- identify and communicate the mission and vision;
- define, implement and review strategies to achieve the stated goals;

- encourage a culture of continuous improvement oriented towards the satisfaction of citizens, employees, suppliers and other relevant stakeholders;
- motivate, support and recognise staff achievements;
- nurture partnerships with customers, suppliers, other governmental agencies and the local community at large; and
- implement a system to measure and monitor performance based on the collection and analysis of reliable and comprehensive data and use it in the decision-making processes.

The breadth of these behaviours is translated into the relationships suggested in KBEM between the leadership criterion and every other construct (either directly or indirectly) and is expected to ultimately lead to OE.

Delight the Customer/Citizen

The concept of serving the "customer" is increasingly seen as both a central element of the TQM philosophy and a powerful and important value in the Public Sector (Radin and Coffee, 1993).

However, the principle of "Delight the customer" must be interpreted with care. Delighting individual customers cannot mean denying other citizens access to a range of municipality services or ignoring the needs of disadvantaged groups (Wilkinson *et al.*, 1998). In the Local Government, the views of individuals must always be balanced against the wider public interest.

Our exploratory work revealed the importance of customers (and citizens at large) in the introduction of TQM approaches in the Portuguese Local Government.

However, indications exist that municipalities are not yet truly citizen-oriented. Adopting a customer focus requires local authorities to change their traditional patterns of thinking and decision-making. As Jones (1999) argues, in most cases there is insufficient community consultation, responsiveness, public input, and accountability.

Being citizen-oriented has two main consequences (Skelcher, 1992a):

- Placing attention on the specific individual and his/her particular needs and requirements; and
- Challenging a long-standing practice that those who use public services should be passive recipients minimally involved in policy-making and service design.

Skelcher (1992a) presents an interesting matrix, illustrating different forms of relationships between customer and local authority (see figure 6.1).

Figure 6.1. Mapping local authority approaches to service quality

(Skelcher, 1992a, p. 20)

The bottom left-hand corner, where customer power is limited and the service assumption is "we know what the customer wants", represents bureaucratic paternalism. Here, the local authority is unresponsive and decisions are made in the belief that it alone knows best. Customer care is exemplified by authorities carrying out initiatives to improve the quality of the service relationships and the physical setting without any substantial shift in power balance. Community power is a situation where customers exercise extensive power over the type and nature of services, but the assumptions underlying the way the authority meets them remain paternalistic. Finally, some local authorities are engaged in developing models of customer service, working with specific sets of customers to review and redesign the services they provide (Skelcher, 1992a).

In the pursuit of organisational excellence, customers have to be empowered to make meaningful choices. In response, the organisation not only listens to them but also quickly tries to meet their demands (Rago, 1996).

Therefore, customer focus requires methods for identifying different customer groups (which are likely to have different needs and expectations regarding the public service) and collecting appropriate feedback from them. Market research, consultation and other forms

of directly listening to customer attitudes and opinions should be developed and used on a regular basis.

Local authorities need to have more information available about the experiences, needs and priorities of their customers. However, as Skelcher (1992a) points out, the hierarchical structure of local authorities and the infrequent contact between politicians, managers and customers mean that important data is not readily available. The application of new consultation and involvement mechanisms may contribute to make municipalities more sensible to environmental changes and more proactive in finding adequate answers to them.

Customer/citizen focus is not the task of a single department or function in the Local Government. In order to delight the citizen, it is necessary to develop the understanding that customer service is everybody's responsibility. From that moment, each local government officer will constantly think in terms of customer needs and satisfaction (Rago, 1996).

External customer/citizen satisfaction

If a municipality is committed to TQM, the needs of citizens and service users have to be in the mind of its entire staff and considerable attention has to be paid to identifying these needs (current and latent) and measuring satisfaction levels. As emphasised earlier, in the Local Government both individual and community needs are important and when conflict between them exists a balance must be found.

Deming (1986) calls for frequent direct interactions with customers to determine their levels of satisfaction on a continual basis. This is a main challenge for the municipalities, which do not typically engage citizens on the process of strategy planning and service design. Great pressure is put on political leaders to promote new forms of interaction, which, if used on a regular basis (and not only at election time), will make the municipality closer to the local communities it represents, thus ultimately enhancing democracy.

Local authorities must also encourage customer complaints and have processes of effectively dealing with them. Complaints provide means of monitoring service quality and should be seen as positive contributions to service improvements.

One of the aims of a quality policy is "to generate public confidence to complain" (Gaster, 1995, p. 124). In fact, as it happens in Portugal, public services are required by law to have complaint procedures in place. However, local authorities frequently do not make the

process of complaining easy nor do they use the information thus obtained to improve service quality (Skelcher, 1992a). In order to be effective, the system should be accessible, user-friendly and integrated into the organisation's management process.

In Portugal, municipalities have the monopoly in the provision of several services. However, in areas such as transportation and refuse collection, they are increasingly facing competitive environments or acting as enabling authorities. Therefore, being attentive to the levels of customer satisfaction achieved by different service providers is essential.

Internal Customer Satisfaction

High-performing organisations listen to their employees and are sensitive to their concerns (Ingstrup and Crookall, 1998). Ultimately, customers and citizens empowerment presupposes staff empowerment (Rago, 1996).

Like external customers, Local Government officers want to feel they are listened to and that their views are taken into account when decisions are made. According to several studies (Skelcher, 1992a), employees feel that their work is important, but believe that their skills are not being fully utilised to the benefit of the local authority and its customers.

Interaction with customers should also be encouraged in order better to identify their needs and requirements.

Communication deficiencies and lack of feedback on performance are usually major obstacles to internal customer satisfaction.

Management By Fact

Improvement ultimately depends on the quality of information and data analysis.

In the Public Sector, decision processes are generally based on managerial assumptions rather than on the systematic examination of the work actually performed (Morgan and Murgatroyd, 1994).

As Dewhurst *et al.* (1999) point out, availability of (accurate and relevant) information is crucial for effective decision-making and for transparency. The later aspect is particularly significant for the Local Government, given the accountability mechanisms and the right citizens have to be informed about how the public money is spent and what is accomplished.

Quality measurement systems have to be developed and used for decision-making at all levels (Hyde, 1992). Such systems necessarily encompass process improvement measures based on customers' evaluations.

All work is process

Public bureaucracies typically operate along vertical functional structures. As Thiagarajan and Zairi (1997b) point out, this prevents people from understanding how their work affects customer satisfaction.

The tendency is for each department to work independently, according to its own logic and with little attention to how it interacts with other parts of the organisation (Lampreia, 1997). This inevitably leads to communication problems, duplication of paperwork, waste and inefficiency.

Analysing the municipality's activities in terms of processes highlights the interdependence among apparently separate actions and shows that for each stage there are customers and suppliers.

Process thinking fosters co-ordination, which is essential to achieve the desired results. Moreover, processes should be mutually supportive and reinforcing.

From process analysis a wide range of measures should be developed (Chen and Sawyers, 1994) to form the basis upon which performance is evaluated.

Measurement

Measurement is crucial for improvement. As Gaster (1995, p. 197) states, "measurement in the form of public survey data, management information systems, and (...) feedback from staff, consumers and the public, can both contribute to providing a benchmark and an audit of what is happening, and can provide the basis for assessing whether particular objectives or specific targets are achieved".

Measurement needs to be made against a series of key indicators, both internal and external (Dale *et al.,* 1997).

Because comparisons are essential to assess progress, the development of benchmarks is very important, especially if they refer to good practice examples (inside or outside the local authority) that can be used as learning experiences.

People Based Management

People are the organisation's greatest asset and, as such, must be understood, invested in, and strategically directed towards the achievement of the organisational goals.

Local Government needs to recognise that TQM implementation means acceptance of a very different set of people management principles and requires the development of adequate plans for personnel recruitment, training, and retention.

Traditionally, each public servant expects to do only the work that his/her contract and job description specifies (Dewhurst *et al.*, 1999). Clearly, this has negative consequences in terms of flexibility and responsiveness.

TQM calls for the development of a much wider range of skills than those required in traditional public sector bureaucracies (Radin and Coffee, 1993).

The fact is that public organisations face difficulties to attract and keep the most competent and committed workforce. This may be explained by the lack of mechanisms to motivate and reward people and by a misleading performance and appraisal system.

An adequate system for recognising and rewarding superior performance is an important element for maximising employees' involvement in TQM (Thiagarajan *et al.*, 2001). The employee compensation system should link quality and customer satisfaction with pay (Zhang *et al.*, 2000), However, this is not easy, especially in the Public Sector. As Ingraham *et al.* (2000) argue, the so-called merit system was created to provide an expert and efficient public service and to provide protection from arbitrariness. The system that evolved, however, is narrowly described, rigid and too concerned with procedures and tenure, rather than focused on quality and excellence.

Managers and leaders in the Public Sector have an important role to play in changing this scenario. They have to provide people with the resources necessary to do a good job and to stimulate positive work attitudes, including loyalty, pride and focus on organisational goals (Dewhurst *et al.*, 1999). In this regard, the organisation's mission and values should provide the basis for performance assessment. All the incentives should be tied to the mission and therefore properly aligned to the organisational goals (Ingraham *et al.*, 2000).

To achieve OE, people need to feel encouraged to contribute to quality improvement constantly seeking new ways to perform their tasks and actively presenting their ideas to their leaders.

Teamwork

Most problems cross divisional lines and internal boundaries and call for co-operation and teamwork among different elements in the organisation. In the Local Government, the complex nature of the majority of the services provided makes the value of teamwork even greater and the involvement of people with different areas of expertise crucial.

By working together people in different parts of the service chain build a better understanding of the service process (Skelcher, 1992a).

However, the traditional way that Local Government is organised, based on strong divisional structures and powerful professional bureaucracies, rather than encouraging collaboration and teamwork puts significant obstacles. Problems include inadequate communication, professional jealousies, tunnel vision, poor strategic planning, fragmented customer service, insufficient staff involvement, and inflexible work practices (Jones, 1999).

A new way of working must be adopted if effectiveness, efficiency and quality are to be pursued. For that, the development of shared responsibilities is essential (Morgan and Murgatroyd, 1994). Leaders are expected to assume an 'enabling style' (Gaster, 1995, p. 86), nurturing networks, encouraging collaboration, and creating multidisciplinary teams.

People Make Quality

Quality and Excellence clearly depend on the contribution of everyone in the organisation. In the Local Government, as a service provider, the role of frontline employees is critical in determining customers' perceptions of quality. Helpful and knowledgeable staff is frequently cited as a key determinant of service quality (Skelcher, 1992a; Nielsen and Høst, 2000).

Giving employees closer to the point of service delivery responsibility for the service standards is seen as a condition for quality improvement (Boland and Silberg, 1996). Empowerment gives Local Government officers the autonomy to identify and respond to many citizens' needs without seeking time-consuming approvals (West *et al.*, 1993).

To make empowerment work, training is essential. It should support values and expectations as defined by the quality policy (Thiagarajan *et al.*, 2001) and, at the same time, contribute to a better knowledge of the political context in which municipalities operate, thus making employees understand organisational constraints and restrictions leaders may face.

Moreover, cross-functional training is necessary to facilitate the existence of single point customer contacts, which citizens often regard as more convenient and efficient.

As Skelcher (1992a) stresses, organisational factors can restrain employees from taking actions which would lead to increased customer satisfaction. It is leaders' responsibility to remove all the barriers that prevent people from doing a good job.

Motivation systems have an important role in facilitating the creation of a Total Quality Culture. The difficulties in the Public Sector of developing a more flexible and wider system of rewards were emphasised in Chapter 3. In the exploratory survey, the issue also emerged as a major constraint for TQM implementation in the Portuguese municipalities. Not only financial bonus and career promotions, which are difficult to alter in the Public Sector, are at stake. Feeling listened to, valued and trusted are, according to a TQM philosophy, essential components of employee satisfaction (Gaster, 1995). Appreciation and recognition should be part of the motivational package. Additionally, promoting social service spirit and developing a sense of public duty have proven to be important motivation factors in the Public Sector (Dewhurst *et al.,* 1999).

For improvement to happen, a culture that promotes innovation and encourages creative problem solving must replace the traditional non-risk taking culture, where the main concern is to avoid mistakes.

According to Carnevale (1995) the main goal of high-performing leadership in government organisations "is to reduce subordinate dependency and build self-leadership among individual workers and teams". Strong hierarchical structures create "an inefficient and inflexible work environment characterised by employee survival mechanisms, defensive tactics, inappropriate attitudes, and a panoply of unproductive and wasteful practices" (Jones, 1999).

Continuous improvement

Since the environment is dynamic and public expectations inevitably rise, there is always room for improvement and local authorities should seek new opportunities to do even better in the future.

Municipalities need to be sensitive to changes in public demands and try to keep pace with them by introducing new practices and/or changing the services they provide.

To support continuous improvement, TQM offers a set of tools (statistical and non-statistical), which, as seen in Chapter 4, are in most cases relatively unknown to the Portuguese municipalities.

Continuous improvement cycle

The continuous improvement cycle is associated with the PDCA cycle introduced by Shewart and popularised by Deming. It means that the Local Government should regularly design plans for improvement, implement the changes necessary (preferentially on a trial basis), check the progress achieved and then, if the results are satisfactory, introduce the new practices on a wider scale.

To facilitate the identification of improvement projects, the municipalities should monitor customer satisfaction. Employees and citizens suggestions are valuable. At the same time, municipalities need to pay attention to what is happening around them and participate in benchmarking exercises. Many municipalities try to identify best practices, but that is seldom done in a systematic way.

Prevention

Preventing problems can represent important productivity and economic gains in the Local Government, since, as demonstrated in different contexts, dealing with the consequences of poor process design is costly. Some problems are difficult to anticipate and may occur no matter how good the planning is. In those cases, the priority is to trace the root causes of the problems and eliminate them so that the same situations do not repeat in the future. Unfortunately, as the exploratory survey revealed, a fire-fighting culture is still prevalent in the Portuguese municipalities.

Mistakes should be regarded as learning experiences (Ingraham, 1995). Recognising mistakes early and quickly correcting them is critical.

6.2. MODEL VALIDATION AND TESTING

As pictured in Figure 2.2, Kanji's Business Excellence model involves four TQM principles – Delight the Customer, Management By Fact, People Based Management, and Continuous Improvement – which operate in two concepts each. These concepts are: External Customer Satisfaction, Internal Customer Satisfaction, All Work is Process,

Measurement, Continuous Improvement Cycle and Prevention. Taken as a whole, the implementation of these TQM dimensions is expected to lead to superior performance.

Our research aims to show whether the scales used to measure the various dimensions of KBEM are acceptable and whether the hypothesised structure of the model (i.e. the proposed links between the constructs) fits the data collected from the Portuguese municipalities.

For the reasons stated in Chapter 5, SEM was employed to test, validate and estimate the organisational excellence model for the Portuguese municipalities.

Leadership is the exogenous construct in the model. This means that, as commonly suggested in the literature, leadership is a necessary prerequisite for TQM implementation and, therefore, its commitment is needed to drive the whole system.

The structural model for the Portuguese municipalities is given in Figure 6.2 (see page 176). The paths represent the hypotheses embedded in KBEM. Since we are using a confirmatory factor analysis methodology (see Chapter 5), it is important to note that the hypothesised relationships have support in the literature, as became apparent in Chapter 2.

- H1: The degree to which leadership is actively committed to TQM will positively affect the establishment of a customer/citizen focus (H1-A), the use of facts and objective data in management decisions (H1-B), the implementation of people-based management (H1-C), and the development of a continuous improvement culture (H1-D);

- H2: The degree to which there is a customer/citizen focus will positively lead to improved external customer satisfaction (H2-A) and increased internal customer satisfaction (H2-B);

- H3: The degree to which management decisions are based on facts will have a positive impact on process management (H3-A) and on the collection and use of measurements (H3-B);

- H4: The degree to which people-based management is practised will enhance teamwork (H4-A) and will support the concept that people make quality (H4-B);

- H5: The degree to which there is a continuous improvement culture will encourage the implementation of a continuous improvement cycle (H5-A) and lead to prevention (H5-B);
- H6: Higher levels of external customer satisfaction will result on higher levels of OE;
- H7: Higher levels of internal customer satisfaction will result on higher levels of OE;
- H8: The degree to which process management is implemented will have a positive impact on OE:
- H9: The degree to which measurement is practised will have a positive impact on OE;
- H10: The degree to which teamwork is practised will have a positive impact on OE;
- H11: The degree to which the people make quality concept is implemented will have a positive impact on OE;
- H12: The degree to which the continuous improvement cycle is implemented will have a positive impact on OE;
- H13: The degree to which there is a prevention attitude will have a positive impact on OE;

A final proposition, as the use of a SEM approach assumes, is that the degree of alignment and consistency among the model constructs has a strong impact on Organisational Excellence.

6.2.1. The Organisational Excellence Questionnaire

The CSFs for Organisational Excellence are best viewed as constructs or 'latent variables', which are not directly measurable. To measure them, multiple indicators or 'manifest variables' were identified.

Previous studies based on KBEM were analysed. In some cases, it was possible to build scales from items successfully used and validated in previous research works (Tambi,

2000; Lan, 2000). However, for this research, several items had to be specifically adapted and/or introduced.

The resulting questionnaire was pre-tested and the scales were reviewed by a small number of experts who have previously worked for the Local Government. Revisions were made based on their comments. As shown in Table 6.1, this resulted in a 51-item instrument (the full questionnaire is presented in Appendix B).

Construct	Measurement items
Leadership for Quality (LEAD)	• Personal responsibility for Quality (PRESP) • Plan for quality management (PLAN) • Heads of departments participation (HEADSP) • Quality goals definition (QGOALS) • Quality values integration in day-to-day management (DAILY)
Customers and Citizens Delight (CCDEL)	• Current and future requirements and expectations (EXPECT) • Customers and citizens feedback use for quality improvement (USEQI)
External Customers/Citizens Satisfaction (ECS)	• Focus on customer satisfaction (FOCUS) • Complaints handling (COMPLAIN) • Value creation (VALUECR) • Satisfaction results comparison (SATCOMP)
Internal Customers/ Staff Satisfaction (ICS)	• Work satisfaction (WORK) • Commitment to satisfy staff needs (NEEDSAT) • Internal customer concept (ICIDEA) • Interaction with customers and citizens (INTERACT)
Management By Fact (MBF)	• Performance measurement systems (PERFMEAS) • Dissemination of key performance measures (DISSEM) • Use of performance measurements to improve (USEMEAS)
All Work is Process (AWP)	• Critical processes identification (CRITID) • Methods for co-ordination (COORD) • Processes design for quality (DESIGNQ) • Innovation in processes and services (INNOV) • Suppliers selection (SUPPLIER)
Measurement (MEASURE)	• Completeness and accuracy (COMPACC) • Citizens and customers satisfaction measurement (CUSTMEAS) • Methodology for assessing and comparing quality (ASSESS)

People Based Management (PBM)	• Human resource management support (HRMSUP) • Recruitment (RECRUIT) • Feedback on employees performance (FEEDBACK) • Means provision for job performance (MEANSJP) • Encouragement of employees participation in quality improvement (EMPPART)
Teamwork (TEAM)	• Teamwork encouragement (ENCOUR) • Cross-functional teams use (CROSS) • Action-teams use in local problems (LOCAL)
People Make Quality (PMQ)	• Quality training to managers (QTRMGRS) • Quality training to all staff (QTSTAFF) • Resources for quality improvement (RESOURCES) • Rewards and recognition of quality achievements (REWARDS) • Collaborative and risk-taking environment (RISKENV)
Continuous Improvement (CI)	• Responsiveness to changes in demands and expectations (RESPONS) • Methods and tools for quality improvement (TOOLS)
Continuous Improvement Cycle (CIC)	• Continuous improvement culture (CICULT) • Suggestions from employees and customers (SUGGEST) • Benchmarking (BENCH)
Prevention (PREVENT)	• Do things right first time (FIRST) • Root causes analysis and removal (ROOT)
Organisational Excellence (OE)	• Goals achievement (GLACHIEVE) • Overall image (IMAGE) • Financial situation (FINANCE) • Demand for the services provided (DEMAND) • Impact on quality of life of the local communities (QUALIFE)

Table 6.1. OE constructs and associated measurement items

6.2.2. The Sample

The questionnaire was sent in May 2001 to all 308 Portuguese municipalities, regardless of whether they had or not participated in the exploratory study. The questionnaires were either directly sent to the mayor or to the contact person provided in the preliminary survey.

As in the previous survey, the questionnaire was accompanied by a covering letter describing the study, soliciting participation and assuring respondents' anonymity. Besides, in order to improve the response rate and demonstrate the importance of the research, an executive summary of the exploratory research findings was also enclosed. Unfortunately,

it was not possible to have the logistic support of the Portuguese National Association of Municipalities (ANMP) in this second round of data collection.

A reply-paid envelope for returning the completed questionnaire was also made available. Since this study concentrates on the municipality level of analysis, each respondent was required to answer the questionnaire as a representative of the municipality. Therefore, there is only one respondent per institution. After a following-up mail in September 2001, eighty-five successfully completed questionnaires were received, corresponding to an effective response rate of twenty-eight percent.

Given the relatively low level of TQM maturity in the Local Government, the novelty of the approach and the large number of requests for the municipalities' participation in various surveys, the response rate is very satisfactory and comparable to that obtained in similar studies conducted in other contexts. Furthermore, the sample size, although not very large, is within the acceptable levels to perform the structural equation modelling analysis using PLS (see section 5.2.3).

The respondents' profile is shown in Table 6.2. All the districts are represented in our sample. Moreover, responses adequately cover large, medium and small municipalities. It can also be observed that from the 85 municipalities, more than a half had already participated in the exploratory survey.

A complete picture of organisational excellence can only be obtained by getting feedback from all the stakeholders of a municipality. With that purpose, a scorecard was developed and specific questionnaires designed to collect citizens data (see Chapter 8). Internally, OE should be measured according to the views of all organisational members.

However, It was not easy to find municipalities willing to extend the assessment exercise to their staff and disclose the information required. Finally, 3 municipalities keen to participate were selected. One of them corresponds to a relatively large municipality (with almost 100,000 inhabitants), whereas the other two have less than 40,000 inhabitants. Since there is a geographic proximity among them – they are all situated near the coast between Lisbon and Porto –, they have some similarities regarding economic, social and educational conditions. The results of this additional study are reported in section 6.3.2.

	No. of participants	% of the existing total in the country
Geographical distribution		
Aveiro	6	31.5
Beja	5	35.7
Braga	2	14.3
Bragança	5	41.7
Castelo Branco	1	7.1
Coimbra	6	35.3
Evora	4	28.6
Faro	5	31.2
Guarda	3	21.4
Leiria	3	18.8
Lisboa	5	31.2
Portalegre	4	26.7
Porto	2	11.1
Santarém	7	33.3
Setúbal	3	23.1
Viana do Castelo	1	9.1
Vila Real	6	42.8
Viseu	7	29.2
Açores	7	36.8
Madeira	3	27.3
Total	**85***	**27.6**
Dimension (Population)		
More than 100,000 inhabitants	6	26.1
Between 10,000 and 100,000 inhabitants	51	28.2
Less than 10,000 inhabitants	28	26.9

* From which 48 had participated in the exploratory study

Table 6.2. Profile of the respondents

6.2.3. Process of Validation, Testing and Estimation

The model shown in Figure 6.2 contains a latent exogenous variable – Leadership (ξ_1) – and thirteen latent endogenous variables, corresponding to all others CSFs and OE (η_2 to n_{14}). Symbolised by rectangular boxes, there are 51 manifest variables associated with

these constructs, as shown in Table 6.1. The arrows leading into the indicators represent an error term (ε) to be interpreted as the measurement error for that item. The arrows characterised by the parameter α represent the weight that each manifest variable has in estimating the corresponding construct. The arrows characterised by the parameter γ represent causal relations between leadership (exogenous construct) and endogenous constructs, while those represented by the parameter β refer to the structural coefficients between endogenous constructs. Finally, the arrows characterised by the parameter ζ represent the disturbance term in the endogenous construct equations. Together, these elements form the system of simultaneous equations presented in section 5.2.2 (see page 148).

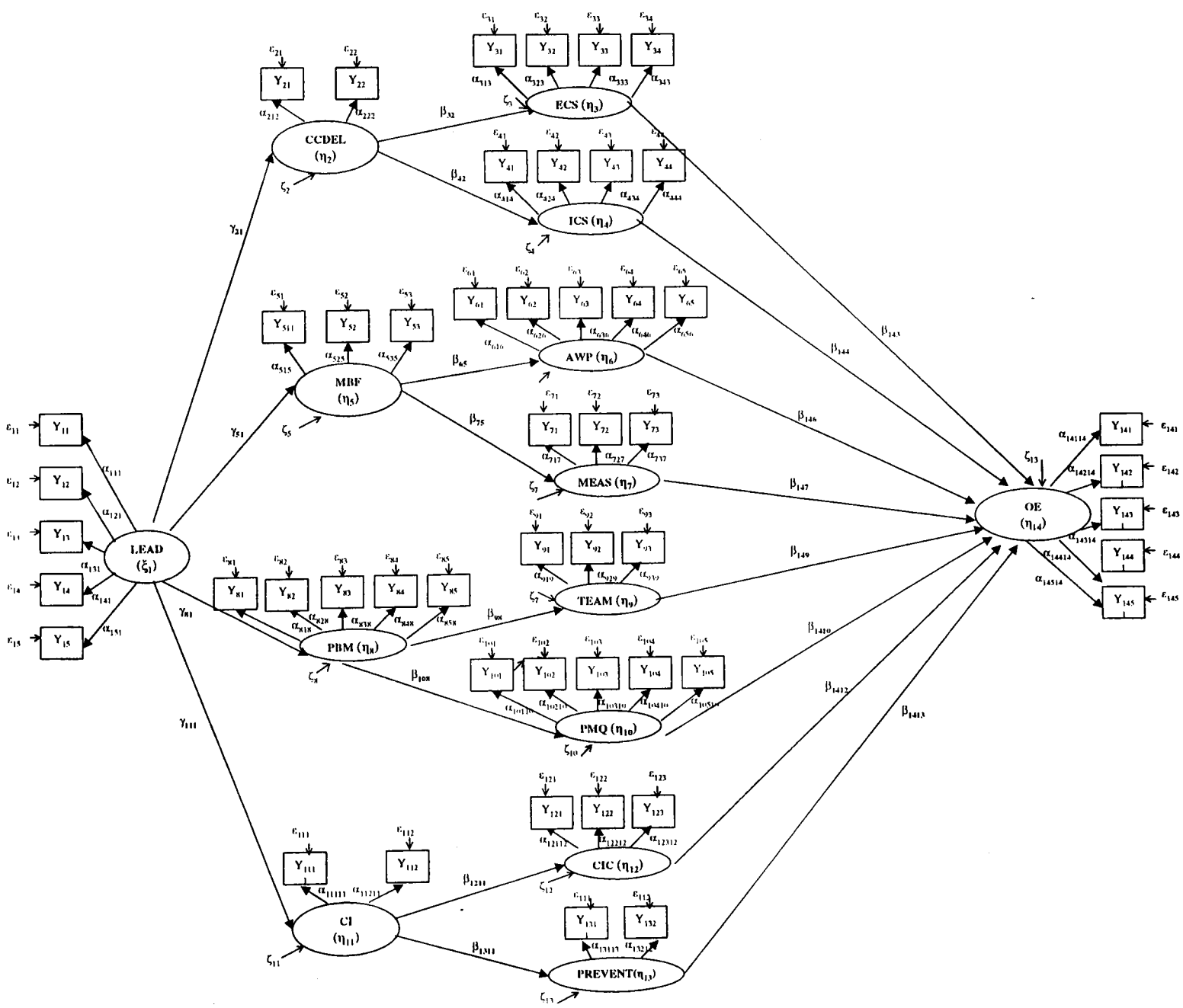


Figure 6.2. Organisational Excellence Structural Model

The two-step approach, advocated by the majority of the researchers (Garver and Mentzer, 1999), was followed. First, the measurement model was validated, through the examination of the various issues associated with construct validity and reliability (see Chapter 5 for a deeper discussion on the subject). Then, the structural coefficients and the latent variable scores were analysed.

The index values for the different CSFs, as well as the final Organisational Excellence score, were calculated using the outer coefficients produced by the PLS (the weights- w_i- for each individual manifest variable) and the mean ($\bar{x}_i$) for each measurement item, according to the following formula (Kanji, 1998):

$$Index = \frac{\sum w_i \bar{x}_i - \sum w_i}{(n-1)\sum w_i} \times 100$$

where n represents the number of points in the scale (in this case 10)

6.3. RESULTS AND FINDINGS

In section 6.3.1, we present the main results of the application of the organisational excellence model to the Portuguese municipalities, while section 6.3.2 discusses the key findings of the administration of the excellence questionnaire to staff members in three municipalities (see explanation in section 6.2.2).

6.3.1. Data Analysis for the Portuguese Municipalities

Following a brief presentation of some key descriptive measures, the analysis of the SEM results is made in two stages. First, we assess the adequacy of the measurement model, and then we proceed to the interpretation of the resulting model coefficients.

- Mean, Standard Deviation and Normality Analysis

For each measurement item Table 6.3 provides a summary of the descriptive statistics.

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test	
				Statistic	Sig.
LEAD	PRESP	7.53	1.77	0.920	.000
	PLAN	5.61	2.08	0.951	.003
	HEADSP	6.08	2.00	0.968	.031
	QGOALS	5.88	2.03	0.962	.012
	DAILY	6.74	1.85	0.952	.003
CCDEL	EXPECT	7.19	1.52	0.907	.000
	USEQI	7.45	1.44	0.906	.000
ECS	FOCUS	7.40	1.49	0.922	.000
	COMPLAIN	7.24	1.85	0.916	.000
	VALUECR	7.22	1.68	0.923	.000
	SATCOMP	5.67	2.10	0.948	.002
ICS	WORK	7.29	1.65	0.922	.000
	NEEDSAT	7.67	1.39	0.921	.000
	ICIDEA	6.52	1.76	0.946	.001
	INTERACT	7.35	1.65	0.930	.000
MBF	PERFMES	6.34	1.88	0.949	.002
	DISSEM	6.35	2.07	0.953	.004
	USEMES	6.20	1.99	0.942	.001
AWP	CRITID	6.47	1.69	0.956	.006
	COORD	6.07	1.77	0.954	.004
	DESIGNQ	5.81	1.81	0.959	.008
	INNOV	5.81	1.87	0.963	.015
	SUPPLIER	6.44	1.61	0.961	.011
MEASURE	COMPACC	5.55	1.72	0.954	.004
	CUSTMEAS	5.21	2.04	0.960	.009
	ASSESS	5.64	1.78	0.960	.009
PBM	HRMSUP	5.79	1.83	0.953	.004
	RECRUIT	6.66	1.72	0.945	.001
	FEEDBACK	6.06	1.69	0.935	.000
	MEANSJP	7.07	1.44	0.941	.001
	EMPPART	7.31	1.48	0.929	.000
TEAM	ENCOUR	7.00	1.76	0.939	.001
	CROSS	6.91	1.68	0.953	.004
	LOCAL	6.96	1.82	0.935	.000

PMQ	QTRMGRS	6.11	2.05	0.968	.035
	QTRSTAFF	5.33	1.97	0.963	.016
	RESOURCES	6.81	1.64	0.957	.007
	REWARDS	5.92	2.07	0.957	.007
	RISKENV	6.22	1.84	0.946	.001
CI	RESPONS	7.09	1.43	0.944	.001
	TOOLS	6.93	1.65	0.907	.000
CIC	CICULT	7.12	1.52	0.916	.000
	SUGGEST	5.96	2.12	0.948	.002
	BENCH	6.16	1.88	0.935	.000
PREVENT	FIRST	6.69	1.66	0.933	.000
	ROOT	6.72	1.67	0.939	.001
OE	GLACHIEVE	7.28	1.37	0.937	.000
	IMAGE	7.44	1.48	0.927	.000
	FINANCE	7.40	1.74	0.917	.000
	DEMAND	7.75	1.38	0.922	.000
	QUALIFE	8.56	1.11	0.882	.000

Table 6.3. Item statistics

The mean values clearly show that municipalities experience some difficulties in the implementation of certain quality practices. Several initial considerations can be made:

- It is evident that while leaders seem to be personally committed to quality management (μ=7.53) they do not have a visible plan to address the issue (μ=5.61) nor are the quality goals clearly defined (μ=5.88);

- Process management items and measurement issues, in particular, have means just above 5 points, confirming the idea that municipalities still adopt the "we know it best" attitude, taking customer and citizen satisfaction for granted without measuring it (μ=5.21);

- It appears to be lacking the collection of a wide and reliable range of measurements (μ=5.55) upon which management decisions could (and should) be based;

- In line with the result that emerged in the exploratory survey, training on quality has not yet reached all staff (μ=5.33) and is often still confined to managers and heads of departments (μ=6.11);

- There is a general view that municipalities are effectively contributing to the improvement of the quality of life of their local communities (μ=8.56);

- The existence of monopolistic situations in various areas partially explains the high demand for the services provided (μ=7.75);

- Municipalities consider they are achieving their key goals (μ=7.28) and that they have a good image (μ=7.44).

It would be interesting to compare these views – essentially given by top political leaders and managers – with those of other staff members (see later in this section) and confront them with citizens' perceptions (see Chapter 8).

Table 6.3 also reveals that, according to the results of the Shapiro-Wilk[7] test, the variables do not follow a normal distribution ($p < 0.05$). In any case, as discussed in Chapter 5, the estimation method employed – the PLS – does not assume normality and therefore is the most appropriate.

- Item Correlation Analysis

In Appendix B - Table 1, the Pearson correlation matrix between all measurement items is shown. Reinforcing the idea that TQM is an integrated philosophy that needs to be applied as a whole, all correlation indices are positive. Additionally, most of them are very significant. Only 3.3% of the correlation pairs is bellow 0.22 and therefore statistically non-significant at p <0.05.

- Reliability and Validity Analysis

Internal consistency of the measurement scales was assessed using the reliability coefficient Cronbach alpha, as suggested in most structural equation applications.

In some cases, it was necessary to exclude some items from the scales (see Table 6.4) which had outer coefficients below 0.1[8]. This rule-of-thumb was suggested in previous studies using the PLS method (Tambi, 2000; Lan, 2000) to ensure that only variables that

[7] The Kolmogorov-Smirnov test is commonly used to test variables for normality. However, the Shapirpo-Wilk test was used, since it is more suitable for small samples.
[8] Of course, that varies with the sample size, but the 0.1 reference is, according to most authors, appropriate when the number of observations is below 250.

adequately reflect the empirical content of the associated construct are retained for further analysis. The final number of items eliminated from the initial scales - 8 out of 51 - is not very high (especially considering that our sample size is relatively small) and the majority of the constructs did not suffer any changes.

Item removed	**Associated construct**
• Leaders have a strategic quality planning process (PLAN)	Leadership
• There are methods to improve co-ordination of interdependent tasks (COORD)	All Work is Process
• The municipality has systems and methodologies for designing innovative processes and services (INNOV)	All Work is Process
• There is an appropriate methodology for assessing and comparing quality (ASSESS)	Measurement
• The municipality provides employees with the necessary means for them to successfully perform their jobs (MEANSJP)	People Based Management
• Action-teams are used to solve local problems (LOCAL)	Teamwork
• Quality related training is given to all staff (QTSTAFF)	People Make Quality
• The municipality rewards people and teams that make significant contributions to quality improvement (REWARDS)	People Make Quality

Table 6.4.Items removed from the initial scales

The item removal procedure has to be carefully carried out. If we look at Table 6.4, we will find a list of important aspects for TQM and OE. Therefore, they correspond to issues that cannot be discarded in future improvement strategies. As a matter of fact, one of the reasons they were negatively affecting the reliability of the associated constructs is that they reflect quality practices that are not being successfully implemented and that significantly deviate from the rest of the items in the scale. That seems to be the case of the (lack) of a plan to manage quality, of the (insufficient) quality training provided to staff and of the rewards systems (that, as mentioned in previous chapters, often do not support quality improvement achievements). In other cases, there may have been some overlapping or wording problems.

Looking at the outer coefficients in the final model (see Table 3 in Appendix B), one can notice that there is an item (NEEDSAT) with a loading close to zero. However, the removal of this question would not contribute to improve the reliability of the scales. Not only the reliability of the associated construct (ICS) is already acceptable, but, in fact, eliminating the item would even have a negative impact on other aspects of the model.

For all these reasons, removing items from the original scales was not an automatic process. Above all, the need to preserve a high level of content validity imposes cautious judgements.

Table 6.5 shows that the Cronbach-alpha values for all scales are above 0.7, as recommended by Nunnally (1967), with the exception of the *People Make Quality* construct. Even in this case, the value significantly exceeds the minimum acceptable level of 0.6 (Flynn and Saladin, 2001). Moreover, it was considered that any further changes would put at risk the meaning of the construct.

It can be thus concluded that, overall, the scales developed to measure the CSFs of OE in the Local Government are reliable.

In the process of assessing the quality of the measurement scales, construct validity, which embraces several aspects, was also examined.

The first issue – content validity – cannot be statistically checked. However, as described in section 5.1, there are several procedures that can be followed to enhance content validity. It is considered that if the scales have support in the literature and/or were validated in previous studies, they should adequately cover the construct domain. The existing literature on critical factors of quality management was extensively surveyed and similar empirical studies carefully reviewed (see section 2.5). Therefore, it is argued that the scales used have content validity. To further reinforce it, a small number of people with working experience in the Portuguese Local Government participated in the pilot testing and their comments were taken into account in the final version of the questionnaire.

Convergent and discriminant validity were inspected using correlation measures. Table 6.5 reports the results for the final measurement scales (after the removal of the items shown in Table 6.4).

Constructs	No. items	Mean	S. D.	Cronbach alpha	Average inter-scale correlation*	Average item correlations	
						Scale items	Non-scale items
LEAD	4	6.56	1.91	0.8345	0.6271	0.5581	0.4366
CCD	2	7.32	1.48	0.8458	0.6162	0.7337	0.4810
ECS	4	6.88	1.79	0.8491	0.6931	0.5935	0.4885
ICS	4	7.21	1.62	0.8629	0.6316	0.6193	0.4415
MBF	3	6.30	1.98	0.9320	0.6144	0.8222	0.4919
AWP	3	6.24	1.71	0.7762	0.6603	0.5322	0.4594
MEASURE	2	5.38	1.89	0.8259	0.6122	0.7133	0.5040
PBM	4	6.45	1.68	0.8152	0.6685	0.5241	0.4691
TEAM	2	6.95	1.72	0.9252	0.6495	0.8616	0.5369
PMQ	3	6.78	1.87	0.6715	0.6335	0.4285	0.4405
CI	2	7.01	1.54	0.8644	0.6957	0.7694	0.5440
CIC	3	6.42	1.86	0.7547	0.6804	0.5154	0.4640
PREVENT	2	6.71	1.66	0.9137	0.6462	0.8411	0.5127
OE	5	7.69	1.43	0.8485	0.6260	0.5459	0.4158

* See also Table 6.7

Table 6.5. Measure characteristics

Table 6.5 provides evidence of the convergent and divergent validity of the scales. As Flynn and Saladin (2001) suggest, two approaches were used. First, the Cronbach reliability coefficient for each scale was compared with the average of its correlations with other constructs. Since all scales have higher homogeneity coefficients than their average correlations with the other scales, convergent validity is established. Second, the analysis of item-to-total correlations (see the last two columns of Table 6.5) shows that on average items that belong to the same construct have higher correlations among them than they do with the ones that form other scales (the only exception to this rule is once again the *People Make Quality* construct). Together, this strongly suggests that the various items do indeed load in the appropriate constructs.

On the whole, we can thus conclude that the measurement model proposed is both valid and reliable.

- Path Analysis

Path analysis calculates the strength of the relationships in the structural equation model using the covariance or the correlation matrix as input. As explained earlier, the software used in this research – K&W – takes the correlation matrix and estimates the structural coefficients based on the PLS method.

Figure 6.3 depicts the path coefficients for the Portuguese municipalities. In the diagram only the direct coefficients are shown, although indirect effects exist and can be determined by following a series of forward-pointing arrows. Through their indirect paths, leadership and TQM principles have an impact on Organisational Excellence.

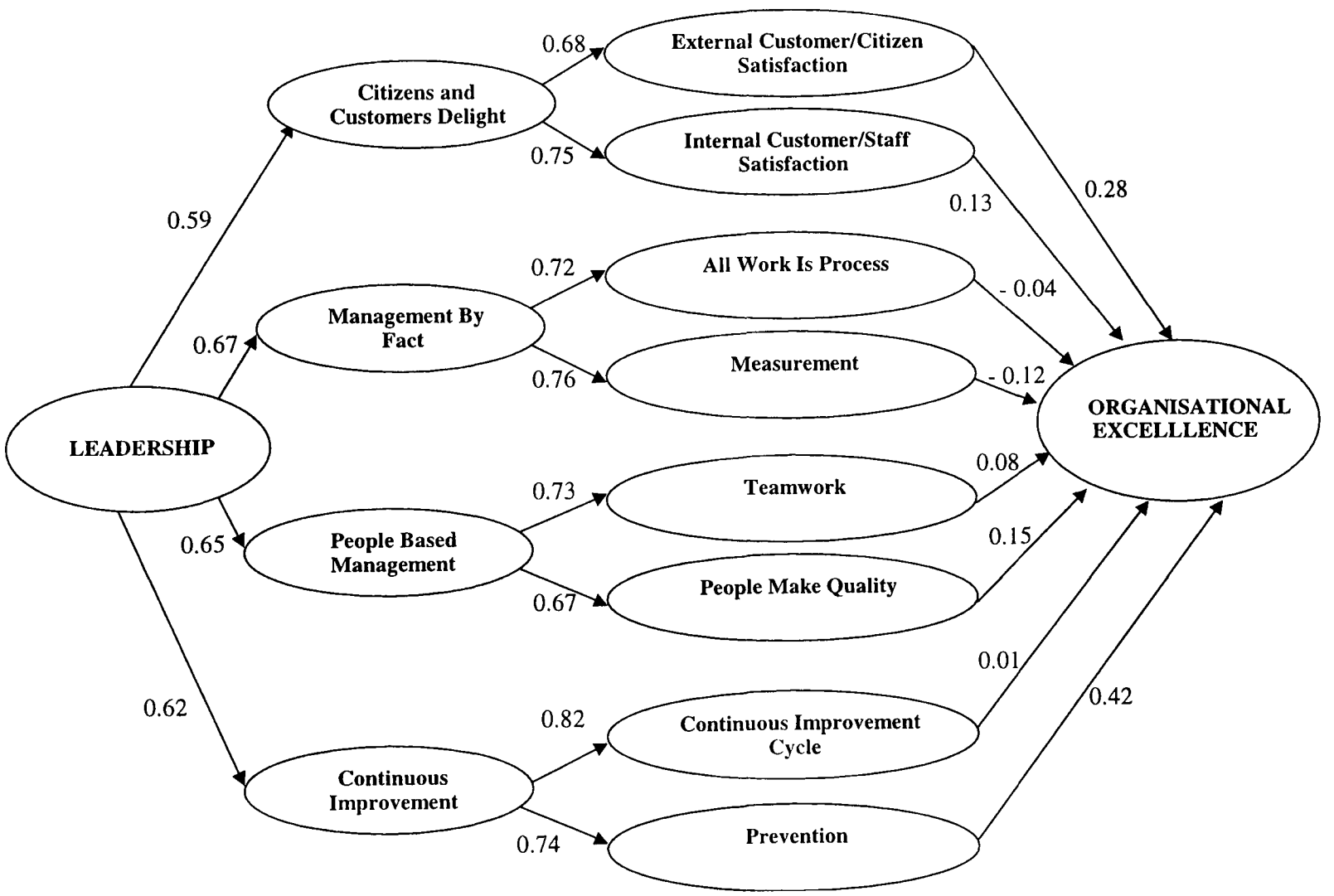


Figure 6.3. KBEM path diagram for the Portuguese municipalities

Most causal links are significant and in the predicted direction. Table 6.6 reports the t-values associated with each structural path coefficient. Since the reasoning behind SEM is the simultaneous estimation and analysis of all paths, this procedure may not be the most appropriate. A more sophisticated method, which does not assume multivariate normal

distributions, is proposed by Bontis (1998). Such method – denominated jack-knife analysis – uses a program developed by Fornell and Barclay. Given the difficulty in finding software able to perform the analysis, it was not possible to use it in our study. Even so, we believe that the t-values provide important indications of the significance of each coefficient.

	Path	β	SD	t-statistic	Valid*
H1-A	LEAD ➜ CCDEL	0.591	0.0886	6.6699	✓✓✓
H1-B	LEAD ➜ MBF	0.670	0.0815	6.2262	✓✓✓
H1-C	LEAD ➜ PBM	0.655	0.0829	7.9031	✓✓✓
H1-D	LEAD ➜ CI	0.625	0.0857	7.2880	✓✓✓
H2–A	CCD ➜ ECS	0.683	0.0802	8.5184	✓✓✓
H2-B	CCD ➜ ICS	0.749	0.0728	10.2850	✓✓✓
H3-A	MBF ➜ AWP	0.718	0.0764	9.3877	✓✓✓
H3-B	MBF ➜ MEASURE	0.760	0.0713	10.6598	✓✓✓
H4-A	PBM ➜ TEAM	0.731	0.0749	9.7642	✓✓✓
H4-B	PBM ➜ PMQ	0.674	0.0811	8.3178	✓✓✓
H5-A	CI ➜ CIC	0.816	0.0635	12.8593	✓✓✓
H5-B	CI ➜ PREVENT	0.737	0.0742	9.9327	✓✓✓
H6	ECS ➜ OE	0.279	0.1325	2.1036	✓✓
H7	ICS ➜ OE	0.129	0.1080	1.1954	-
H8	AWP ➜ OE	-0.042	0.1184	-0.3504	-
H9	MEASURE ➜ OE	-0.117	0.1291	-0.9118	-
H10	TEAM ➜ OE	0.076	0.1167	0.6474	-
H11	PMQ ➜ OE	0.151	0.1108	1.3638	✓
H12	CIC ➜ OE	0.006	0.1445	0.0417	-
H13	PREVENT ➜ OE	0.425	0.1245	3.4134	✓✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 6.6. Validation of hypothesis testing

The prime of KBEM – Leadership – is in fact strongly associated with all TQM principles, thus validating H1-A, H1-B, H1-C, and H1-D.

Furthermore, the extent to which TQM principles are in place indeed enhance the implementation of the critical TQM concepts (H2-A, H2-B, H3-A, H3-B, H4-A, H4-B, H5-A, H5-B are all valid at $p < 0.01$).

The final links between the TQM concepts and Organisational Excellence are in general positive but less strong. H6, H11, and H13 are valid at $p < 0.10$. The paths between *Internal Customer Satisfaction* and *OE* (H7) and between *Teamwork* and *OE* (H10) are also positive, but not high enough to be statistically significant. The paths linking *All Work is Process* and *Measurement* to OE are not significant.

The relatively weaker links between the TQM concepts and OE, if compared with the other causal paths in KBEM, suggest that Portuguese municipalities are not yet translating the TQM orientation (as supported by the high structural coefficients involving *Leadership* and the TQM principles) into appropriate systems for performance measurement and may be overestimating their levels of OE. These issues are further investigated in Chapters 9, where internal and external stakeholder measurements are confronted.

Positive correlations among the latent constructs – as shown in Table 6.7 – indicate that the factors that form KBEM complement each other. Quality efforts concentrated in a limited number of dimensions are less than effective. There is a need to carry out a concerted effort on several fronts in order to achieve OE. The weakest correlation values can be found for the *Management By Fact* and *Measurement* constructs, showing that these critical factors are not sufficiently integrated with other quality management practices.

Correlation values additionally confirm that the proposed CSFs are strongly related with the measures of OE, thus indicating criterion-related validity. Yet, a more conclusive assessment would require analysing the power of the model in predicting future levels of OE, which is not possible to carry out in a single survey.

High correlations among the model constructs may indicate multicollinearity. However, as discussed in Chapter 5, its negative consequences in the estimation of the path coefficients are minimised when using PLS.

	LEAD	CCDEL	ECS	ICS	MBF	AWP	MEASURE	PBM	TEAM	PMQ	CI	CIC	PREVENT	OE
LEAD	1													
CCDEL	0.59	1												
ECS	0.70	0.68	1											
ICS	0.65	0.75	0.65	1										
MBF	0.67	0.52	0.75	0.51	1									
AWP	0.66	0.54	0.73	0.60	0.72	1								
MEASURE	0.59	0.52	0.78	0.47	0.76	0.71	1							
PBM	0.66	0.59	0.71	0.75	0.67	0.73	0.56	1						
TEAM	0.66	0.64	0.65	0.69	0.56	0.64	0.55	0.73	1					
PMQ	0.55	0.59	0.61	0.63	0.55	0.61	0.62	0.67	0.63	1				
CI	0.62	0.62	0.77	0.66	0.68	0.74	0.69	0.71	0.65	0.74	1			
CIC	0.60	0.61	0.68	0.60	0.62	0.64	0.68	0.67	0.75	0.73	0.82	1		
PREVENT	0.58	0.64	0.65	0.61	0.47	0.68	0.54	0.63	0.67	0.65	0.74	0.79	1	
OE	0.60	0.72	0.66	0.64	0.51	0.59	0.50	0.61	0.64	0.63	0.62	0.67	0.75	1

Table 6.7. Correlation matrix among latent variables

The strength of the relationships among constructs provides indications of the quality of the structural model. In order to reinforce the goodness-of-fit of KBEM for the Portuguese municipalities, Table 6.8 shows the R^2 value for each dependent variable. It indicates the percentage of variation in the construct explained by the variables included in the paths.

Endogenous construct	**R^2 %**
Customers and Citizens Delight	34.90
External Customer Satisfaction	46.65
Internal Customer Satisfaction	56.03
Management By Fact	44.91
All Work is Process	51.50
Measurement	57.79
People Based Management	42.94
Teamwork	53.46
People Make Quality	45.46
Continuous Improvement	39.02
Continuous Improvement Cycle	66.58
Prevention	54.31
Organisational Excellence	65.05

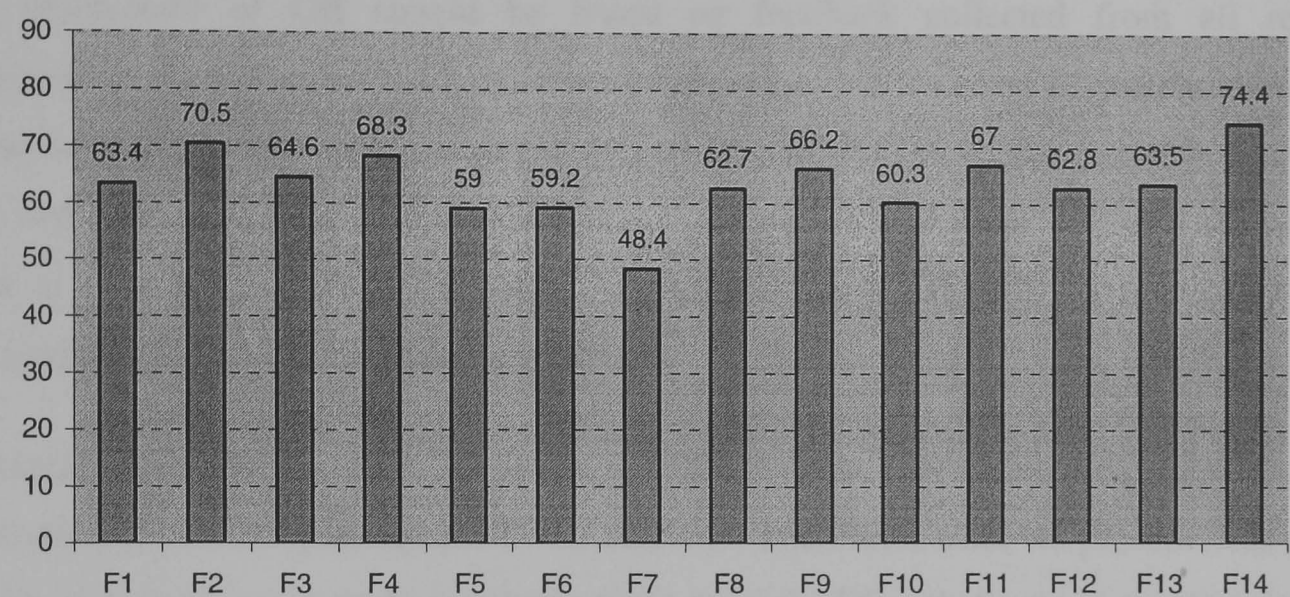
Table 6.8. R^2 statistic for each endogenous construct

The large majority of the R^2 exceed 0.5, which is the level usually recommended in behavioural statistics (Lan, 2000). Even in the cases when that standard is not achieved, the R^2 are very respectable, given the wide range of variables influencing the various constructs. Table 6.8 shows that the model captures more than 65% of the variation in OE for the Portuguese municipalities.

The significance of the model constructs together with the high R-squares provide good indications of the adequacy of the model to explain OE in the Portuguese Local Government.

Having established the good-fit of the model – which the data supports – we will turn our attention to the interpretation of the final scores obtained for each critical factor and OE (details on the calculations of the indices can be found in Table 4 in Appendix B).

The scores achieved by the Portuguese municipalities in each model dimension are shown in Figure 6.4.



F1 - Leadership; F2 - Customers and Citizens Delight; F3 - External Customers & Citizens Satisfaction; F4 - Internal Customers/Staff Satisfaction; F5 - Management By Fact; F6 - All Work is Process; F7 - Measurement; F8 - People Based Management; F9 - Teamwork; F10 - People Make Quality; F11 - Continuous Improvement; F12 - Continuous Improvement Cycle; F13 - Prevention; OE - Organisational Excellence Index

Figure 6.4. Indices of CSFs and Organisational Excellence

By any standards, the final OE index (74%) is good (Kanji, 2000a). However, as Figure 6.4 reveals, the municipalities that participated in our study are not performing equally well across all critical factors. *Customers/Citizens Delight* and *Continuous Improvement* are major strengths. On the other hand, the score achieved in the *Measurement* construct is particularly worrying. It may indicate that the municipalities are not assessing their performance correctly and, thus, judge the results of their actions based on intuition rather than facts. In the absence of reliable measurements, they may be overestimating their citizens and staff satisfaction, as well as other indicators of OE. This possibility is confirmed in Chapter 8, where the results from the citizens' assessment are reported.

Next, the findings that emerged from the small-scale study conducted in three municipalities, where the excellence questionnaire was also administered to staff members, are presented.

6.3.2. Small-scale Study for the Measurement of OE from an Internal Stakeholders' Perspective

The assessment of OE should be based on feedback collected from all relevant stakeholders. As discussed in Chapter 3, a municipality has a variety of stakeholders and it would be virtually impossible to explicitly consider all of them in this research. Therefore, only two main groups were chosen – citizens and staff. To measure OE from the citizens' point of view a Business Scorecard was developed (see Chapter 8). At the moment, we concentrate on the staff members' perspective.

As explained in Section 6.2.2, it was not possible to collect data from staff members in the 85 municipalities that participated in the research. Therefore, what we present here are the results of a small-scale study involving three municipalities that agreed to administer the organisational excellence questionnaire to their full-time staff.

Following the approval to send out the questionnaire, responses were requested via internal mail. Seventy questionnaires were successfully completed. Fear and unfamiliarity with some quality concepts explain the difficulty in getting a higher level of participation.

Responses essentially come from administrative and technical personnel. Given the limited number of questionnaires, the structural analysis could not be conducted separately for each municipality but only aggregately to the all data set.

Moreover, because the sample only refers to three municipalities, there is no attempt to make any direct comparisons with the results presented earlier. Yet, apart from giving an idea about where the main municipal strengths and weaknesses lie from the staff's perspective, this small-scale study represents an additional opportunity to test and validate the proposed organisational excellence model.

For the three municipalities analysed, Table 6.9 shows the mean values (in a 100 points scale) obtained in each TQM principle and core concept, as well as the final OE index.

Critical success factors and OE	**Mun. A**	**Mun. B**	**Mun. C**	**Aggregated means**		
				Staff	**"Leaders"**	**Dif.**
Leadership	62	47	53	54	80	-26
Customers and Citizens Delight	64	49	52	55	80	-25
External Customer Satisfaction	65	49	51	55	81	-26
Internal Customer Satisfaction	62	44	58	55	69	-14
Management By Fact	65	47	55	56	81	-25
All Work is Process	61	41	52	51	75	-24
Measurement	58	40	48	47	68	-21
People Based Management	56	31	45	44	63	-19
Teamwork	63	39	46	49	72	-23
People Make Quality	51	36	43	43	67	-24
Continuous Improvement	65	49	52	55	82	-27
Continuous Improvement Cycle	60	45	46	50	72	-22
Prevention	63	40	48	50	77	-27
Organisational Excellence	73	53	65	64	80	-16

Note: The scores correspond to simple means according to the measurement items associated with each construct.

Table 6.9. Mean Values for CSFs and Organisational Excellence by Municipality

Municipalities A, B, and C are significantly different in many aspects, but yet some important similarities emerge.

Looking at Table 6.9, one can see that municipality A has mean scores above 60% in most CSFs, resulting in a very reasonable OE index (73 points). Municipality C has a greater divergence in the scores obtained for the different quality management principles and core concepts, but the final OE is still around 65%. The situation for municipality B is considerably worse, since the staff members who participated in the study negatively assess its performance in several areas.

Regardless of these differences, there is some consistency in terms of the strongest and weakest areas. The CSFs related to customer and citizens satisfaction generally receive the best scores. Continuous improvement is another principle that seems to be implemented satisfactorily. On the other hand, the factors that deal with human resource management issues are according to staff views major weaknesses. Once again, this confirms the

inadequacy of several human resources management practices prevalent in the Public Sector.

A detailed analysis, question by question – see Table 6 in Appendix B – reveals that staff members give low scores to questions that concern quality training (μ=3.71) and recognition of quality achievements (μ=4.13), thus reinforcing the problems identified by political leaders and top managers of the 85 municipalities that participated in the general study. Furthermore, employees also feel they do not receive enough feedback (μ=4.10) and that human resources policies do not support quality improvement (μ=4.33).

Taken as a whole, the difference, in absolute numbers, between the institutions' responses, provided by their political leaders, and the scenario that comes from the analysis of staff questionnaires is very significant. This fact stresses the need in each municipality to expand the assessment exercise as much as possible so that a correct image of OE can emerge.

- Structural Model for the Staff Data

The entire data set (for the three municipalities) was used to perform the structural analysis. Clearly, it would be better to carry out the analysis for each municipality, but this was manifestly impossible due to the limited number of questionnaires available (around twenty-five in each case).

Once more, Table 6.10 shows that, according to the usual parameters, the scales are valid and reliable.

Constructs	No. items	Mean	S. D.	Cronbach alpha	Average inter-scale correlation*	Average item correlations	
						Scale items	Non-scale items
LEAD	4	5.52	2.53	0.8904	0.7434	0.6737	0.5674
CCD	2	5.54	2.21	0.8899	0.7515	0.8118	0.6239
ECS	4	5.56	2.30	0.9095	0.7437	0.7160	0.6304
ICS	4	5.42	2.41	0.9158	0.8084	0.7316	0.6226
MBF	3	5.59	2.30	0.9065	0.7728	0.7633	0.6292
AWP	3	5.20	2.16	0.8793	0.8047	0.7266	0.6807
MEASURE	2	4.98	2.30	0.7426	0.8150	0.6009	0.6689
PBM	4	4.39	2.40	0.9272	0.7979	0.7667	0.6592
TEAM	2	4.86	2.48	0.9370	0.7707	0.8815	0.6786
PMQ	3	4.59	2.34	0.8606	0.7991	0.6784	0.6551
CI	2	5.58	2.25	0.9229	0.8192	0.8577	0.6852
CIC	3	5.12	2.32	0.8899	0.7762	0.7250	0.6198
PREVENT	2	5.08	2.29	0.8905	0.7635	0.8036	0.6370
OE	5	6.31	2.15	0.8603	0.7610	0.5837	0.5633

* See also Table 10 in Appendix B.

Table 6.10. Measure characteristics (Staff data)

All Cronbach alphas are above 0.7, indicating that the measurement scales are internally consistent. Moreover, the examination of correlation values between items that belong to the same scale and those associated with other constructs suggests discriminant validity. In addition, the internal consistency of the scales also exceeds the average inter-scale correlation demonstrating convergent validity.

Figure 6.5 depicts the OE model for this small-scale study. It is possible to observe that the structural coefficients are all positive, though a few very low. The paths from leadership to the TQM principles are particularly high, as well as the links between the TQM principles and core concepts. Thus, all hypotheses are validated at a significance level of 0.05, with the exception of some paths between core concepts and OE (see Table 11 in Appendix B).

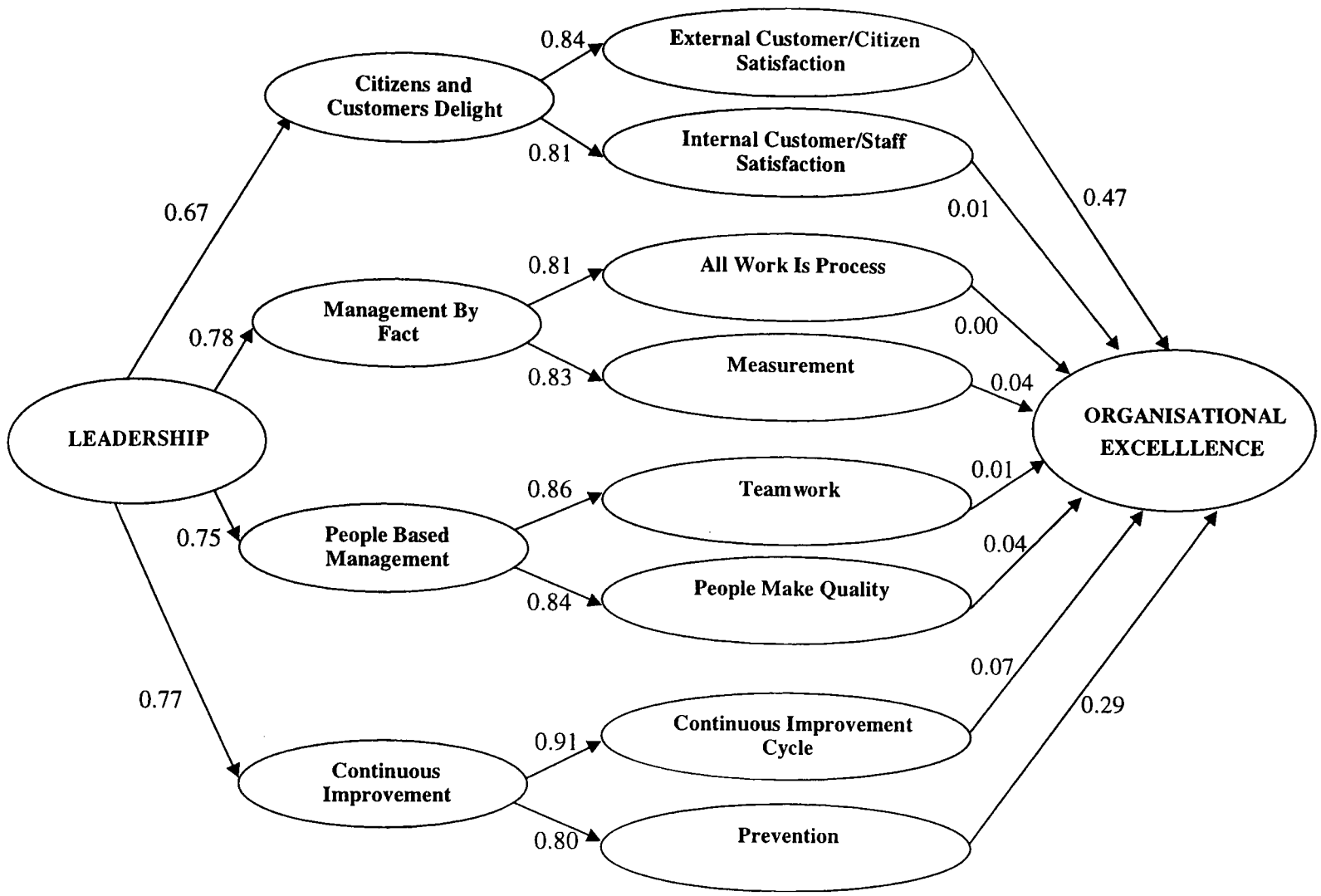


Figure 6.5. OE path diagram (Staff data)

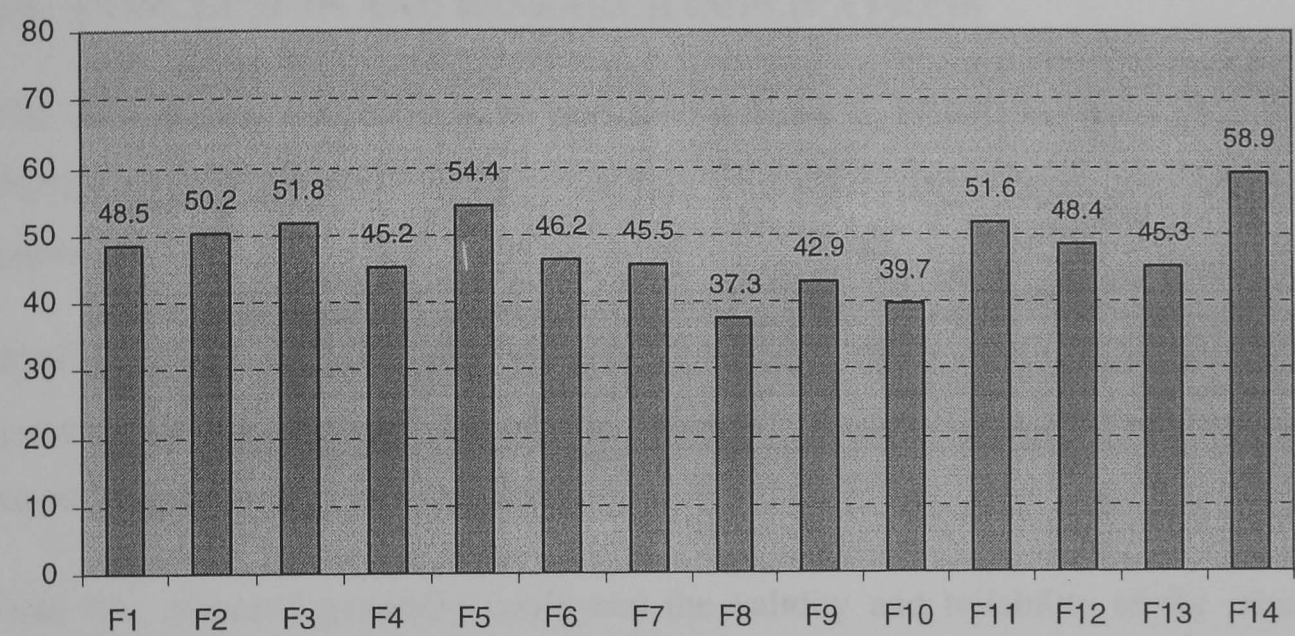
Endogenous Construct	Number of items	R^2 %
CCD	2	45.5
ECS	4	69.8
ICS	4	65.7
MBF	3	61.5
AWP	3	65.0
MEAS	2	69.3
PBM	4	56.3
TEAM	2	74.5
PMQ	3	71.1
CI	2	59.1
CIC	3	83.0
PREV	2	64.2
OE	5	73.5

Table 6.11. R^2 statistic for each endogenous construct (Staff data)

Furthermore, as Table 6.11 shows, the high R^2 obtained for all endogenous variables indicate that the model explains a large proportion of the constructs variability.

Finally, the strong correlations between the various TQM principles and core concepts and OE (see Table 10 in Appendix B) reinforce the adequacy of the model and support its claim of successfully predicting OE.

Figure 6.6 shows the latent variable scores for the three municipalities.



F1 - Leadership; F2 - Customers and Citizens Delight; F3 - External Customers & Citizens Satisfaction; F4 - Internal Customers/Staff Satisfaction; F5 - Management By Fact; F6 - All Work is Process; F7 - Measurement; F8 - People Based Management; F9 - Teamwork; F10 - People Make Quality; F11 - Continuous Improvement; F12 - Continuous Improvement Cycle; F13 - Prevention; OE - Organisational Excellence Index

Figure 6.6. Indices of CSFs and Organisational Excellence (Staff data)

As emphasised before, the results have to be regarded with additional care, given the limited number of questionnaires analysed.

The final OE index for this sample is 58.9 points, but performance in several areas is less than satisfactory. That is particularly the case of *people based management* (37.3), *people make quality* (39.7), and *teamwork* (42.9). These weaknesses are somehow compensated with the reasonable scores achieved in other dimensions, such as *citizens and customers delight* (50.2), *external customer satisfaction* (51.8) and *continuous improvement* (51.6).

Generalising these findings is problematical. To have more reliable insights, it would be necessary to collect data from staff members in all municipalities. Only then, it would be possible to make any direct comparisons with the results presented before.

Even so, the OE model tested demonstrated to be valid. Additionally, the need to take into account staff views in the measurement of OE was stressed.

6.4. CONCLUSION AND RESEARCH IMPLICATIONS

The aim of this chapter was to test and validate a model for measuring OE in the Portuguese municipalities. Such model is based on the KBEM constructs and uses a SEM approach.

With this purpose, data was collected from the Portuguese municipalities, using a questionnaire specifically designed to fit their particular context. On total eighty-five municipalities took part in this study.

Data thus gathered generally confirmed the validity and reliability of the measurement scales developed and supported the TQM principles and core concepts embedded in KBEM.

Partial least squares were used to estimate the path coefficients and to calculate the latent variable scores.

- The final Organisational Excellence Index (OEI) for the Portuguese municipalities is above 70 points, what must be regarded as very reasonable.

- Nonetheless, performance varies considerably across the model dimensions, with scores ranging from 48% in the *measurement* criterion to 70% in the *customers and citizens delight* principle.

This fact clearly shows that the Portuguese municipalities have been experiencing some difficulties in adopting some critical factors and calls for a careful interpretation of the OEI.

- Both the general survey and the small-scale study confirm the existence of problems in the following areas: *measurement*, *all work is process* and *people make quality*. These findings are hardly surprising given the bureaucratic tradition of Local Government institutions which keeps them tied to hierarchical structures and inflexible human resource practices.

- Managers and staff members acknowledge the importance of linking rewards to quality achievements and investing in quality training, but recognise the low level of implementation of such practices;

- On the positive side, data analysis indicates that there is a concern to put customers and citizens' satisfaction at the top and an effort to continuously improve the services provided.

- However, insufficient measurement of customer satisfaction may indicate that some municipalities still have a "know it-all" attitude (Nwankwo and Richardson, 1994) about the needs of their citizens and customers. Initiatives carried out by several institutions to involve citizens in the definition of service standards and to make them participate in decision-making processes demonstrate the willingness to start inverting this tendency.

- In the absence of adequate systems of performance measurement, as recognised by most municipalities, the high perceptions of customer satisfaction and OE might be somehow erroneous.

- The small-scale study, where staff from three municipalities participated, stressed the importance of collecting feedback from different stakeholders and including these measurements in the assessment of OE.

The Excellence Seeker's approach (Kanji, 2000a) gives indications about possible strategies to enhance OE. It is based on an optimisation algorithm that uses the information provided by the structural coefficients[9] (which show the impact that a unitary change in

[9] In case of indirect effects, the impact can be calculated by simply multiplying the inner coefficients that form the respective path.

each CSF has on OE) to determine which areas to improve and by how much in order to reach a particular Excellence Index.

Additionally, the algorithm allows the introduction of some constraints to reflect the fact that resources are limited and that, in practice, is impossible to go beyond a certain rate of improvement.

The steps involved are as follows:

1. Choose an upper limit for increasing each CSF;
2. Select a target level for the OEI;
3. Determine the required increase in OE by subtracting current level from target level;
4. Choose the factor with the highest marginal contribution;
5. Make the largest possible increase to factor index in order to achieve the target level without exceeding the factor's upper limit;
6. If target is reached, stop. If not, select the factor with the next highest marginal contribution.

Table 6.12 shows the improvements necessary to increase the OE index for the Portuguese municipalities to 80, 85 and 90 points, assuming an 85% upper limit for the various CSFs.

It must be stressed that the algorithm is only a mathematical simulation exercise and does not necessarily show the real consequences of improvement efforts. First of all, it is a static analysis tool that uses the coefficients that were calculated in a particular moment, but that are likely to change in the future. Secondly, there are many inter-relationships that cannot be accounted for. The model is holistic and any change in a particular component has impacts on other areas, some of them difficult to predict.

			Original index	Target organisational excellence index		
Critical success factors and organisational excellence	**Marginal contrib.***	**Upper limit**	**OE=74**	**80**	**85**	**90**
Leadership	0.193	85	63	63	63	63
Delight the Customer	0.190	85	71	71	71	71
External Customer Satisfaction	0.279	85	65	65	65	78
Internal Customer Satisfaction	0.129	85	68	68	68	68
Management by Fact	0.000	85	59	59	59	59
All Work is Process	0.000	85	59	59	59	59
Measurement	0.000	85	48	48	48	48
People Based Management	0.034	85	63	63	63	63
Teamwork	0.076	85	66	66	66	66
People Make Quality	0.151	85	60	60	60	60
Continuous Improvement	0.311	85	67	67	78	85*
Continuous Improvement Cycle	0.001	85	63	63	63	63
Prevention	0.425	85	64	78	85*	85*

* Negative contributions are theoretically inadmissible. Therefore, for *All Work Is Process* and *Measurement* we assumed a null impact.

Table 6.12. Revised Indices of CSFs and Organisational Excellence

Table 6.12 shows that theoretically it would be possible to achieve a OEI of 90% only by improving *Prevention*, *Continuous Improvement* and *External Customer Satisfaction*. However, it would be absurd to obtain such an outstanding excellence index, while maintaining *Measurement* at a negative level.

The seeker's approach is useful to evaluate possible improvement strategies, but does not predict in exact terms how the future situation will be if a particular course of action is taken. In some circumstances, as it happens in our case, some indications can inclusively be misleading. Hence, the excellence seeker's results have to be correctly interpreted, taken into consideration the structural equation analysis as a whole.

According to the data analysis, the paths linking *Management by Fact* (and its associated concepts) to OE are not significant. However, as mentioned earlier, as the municipalities progress in the implementation of TQM, they will understand the importance of measurement and process management.

- Therefore, and conversely to what the simple application of the algorithm indicates, we would recommend Portuguese municipalities to concentrate on analysing their critical processes and to collect, analyse and disseminate reliable and accurate measurements.

Above all, the application of the KBEM to the Portuguese municipalities demonstrated that:

- Leadership – the prime of the model – strongly determines the implementation of all TQM principles and core concepts, as the high path coefficients that link this construct to the rest of the model reveal. Thus, the criticality of leadership is reinforced.
- The constructs that make up KBEM are indeed highly correlated with each other, reinforcing the holistic nature of TQM.
- The large majority of the hypothesis holds.
- As the high R^2 also indicate, the model has a good-fit.
- The scales developed to measure each model construct have convergent validity, divergent validity and internal consistency, as suggested by the correlation analysis and the Cronbach-alpha coefficients.

Overall, the model proposed was able to capture the essential dimensions that explain Organisational Excellence in the Portuguese municipalities. However, that does not mean there is no room for improvement. Possibly, there are links between model constructs which were not investigated. In the future, it would be interesting to analyse and test new interactions. Moreover, this was the first application of KBEM in the Public Sector and the measurement scales can probably be further refined by adding new items and/or removing others so that they better reflect the meaning of each driver of OE in the Local Government. Finally, the quality of the findings would clearly benefit from a larger amount of data and, particularly, from a more extensive inclusion of staff questionnaires.

CHAPTER 7. LEADERSHIP EXCELLENCE IN THE PORTUGUESE MUNICIPALITIES

There is a large consensus in the literature that leadership is the most critical aspect for successful TQM implementation (Dale and Cooper, 1994; Deming, 1986; Oakland, 1999; Zairi, 1995, 1999) and, ultimately, to achieve Organisational Excellence. It is typically claimed that leadership commitment to quality improvement has to be the first step in stimulating the TQM approach. Therefore, Leadership is the prime of the Organisational Excellence Model for the Portuguese Local Government, as presented in Chapter 6.

Given the criticality of leadership, this construct was analysed in some detail in this research. From an extensive literature review, a new model for measuring Leadership Excellence was developed (see Kanji and Sá, 2001a). The model expands the leadership concept embedded in KBEM and was empirically tested and validated in the Portuguese municipalities.

Following a brief overview of the main theories developed in the study of leadership, the chapter discusses the particular roles and requirements of leadership in the Local Government. Next, the structural leadership model is presented and the meaning of each of its constructs described. The results obtained from its application in the Portuguese municipalities are then analysed. The chapter ends with a summary of the main findings and possible improvement strategies to make political leaders and Local Government managers more effective and efficient in the pursuit of Organisational Excellence.

7.1. LEADERSHIP THEORIES AND APPROACHES

The abundant literature on the subject suggests that there are numerous definitions of leadership (Kakabadse and Kakabadse, 1998). In line with different management theories, leadership has been defined in terms of individual personality traits, behaviours, interpersonal exchange relationships, interaction patterns, role relationships, follower perceptions, task goals, organisational positions, and nature of work processes (Korac-Kakabadse and Korac-Kakabadse. 1998).

Based on an extensive literature review, Shriberg *et al.* (1997) enunciates five representative definitions of the concept:

- The art of influencing people by persuasion;
- Inter-personal influence directed through communication toward goal achievement;
- The influential increment over and above mechanical compliance with directions;
- An act that causes others to act or respond in a shared direction; and
- The principal dynamic force that motivates and co-ordinates the organisation in the accomplishment of its objectives.

From the above definitions, and regardless of any differences that may exist among different researchers, the influential component of leadership emerges as a unifying element.

In the study of leadership, several theories and models have been proposed. Traditional leadership theories may be classified into three dominant approaches, namely traits approach, behavioural approach and situational/contingency approach. Individually, each provides valuable insights and has its own limitations. Collectively, they give a multifaceted view of leadership. Table 7.1 summarises and compares these approaches.

It is also usual to distinguish between transformational and transactional leadership roles.

The transformational approach essentially describes how leaders can initiate, develop, and carry out significant changes in organisations (Korac-Kakabadse and Korac-Kakabadse, 1998). To explain how certain leaders are able to inspire followers to accomplish great things, Bass developed the Transformational Leader Model. According to his view, transformational leaders need to act as strong role models and create a vision that gives meaning and clarifies the organisation identity. At some extent, under this model leaders become "social architects" (Northouse, 1997).

Table 7.1. Traditional leadership approaches in brief

(Adapted from Kanji and Sá, 2001a)

On the other hand, contingency-reward based exchanges are at the core of transactional leadership (Jung and Avolio, 1999). Accordingly, the main focus of transactional leaders is on setting goals, clarifying the link between performance and rewards, and providing constructive feedback to keep followers on task (Jung and Avolio, 1999).

In any case, there is a general agreement that both transactional and transformational leadership roles are necessary and complementary in any organisation.

Emergent issues such as quality, flexibility, adaptability, speed and experimentation (Graetz, 2000) call for new perspectives on leadership.

Traditional (and somehow static) models are incapable of adequately explaining leadership within organisations seen as complex adaptive systems, dominated by properties of chaos, emergence and generation (Collier and Esteban, 2000). In these organisations, leadership is mainly "the systemic capability, diffused throughout the organisation and nurtured by the members, of finding organisational direction, of generating and maintaining continual renewal by encouraging, harnessing and directing creative and innovative capabilities, while simultaneously holding in tension the processes of responsiveness to the environment on the one hand, and the maintenance of internal integrity of purpose on the other" (Collier and Esteban, 2000). This definition emphasises the nature of leadership as an ongoing process, rather than focusing on the person of the leader, and stresses the importance of nurturing leadership skills throughout the organisation (not exclusively at the top).

In accordance with the TQM philosophy, systemic leadership tends to regard each organisational member as a fully responsible autonomous agent with powers of judgement and decision-making. Closely related to this view, is the need to have sound shared values. Leaders must be actively involved in the process of generating and communicating the organisational values. Systemic leadership puts the sense of belonging to a community at the core of this process, giving organisations a sense of identity.

The importance that teams assume in contemporary organisations also raises new challenges to modern leadership theories. An immediate consequence is that of making the line that separates leaders from followers less clear and more flexible. As a result, rather than giving instructions and controlling subordinates actions, in team-based organisations

leaders have to reconsider their roles and develop new capacities, such as generating shared knowledge among team members, acting as mentors, providing information, promoting open communication, and allocating resources efficiently (Horner, 1997). Besides, in this new context, the leadership focus need to shift from that of the leader as a person to concentrate on leadership as a process (Horner, 1997).

The creation of learning organisations also poses some new pressures on leadership. Senge (1990) believes that over the long run superior performance essentially depends on superior learning and stresses that learning must occur at every organisational level as an ongoing process.

The author of *Learning Organizations* argues that the traditional view of leaders – as special people who set direction and make the key decisions – is rooted in a individualistic and non-systemic perspective that prevents collective learning from happening. In contrast, in learning organisations, leaders are expected to be designers (governing ideas, translating them into business decisions, and fostering strategic thinking), teachers (or coaches, helping everyone in the organisation to gain insightful views of reality), and stewards (serving the people they lead and the organisation's mission).

Therefore, the 'old model' in which "the top thinks and the local acts" must give way to integrating thinking and acting at all levels (Senge, 1990). Accordingly, leadership becomes a creative and collaborative process.

Overall, the new leadership roles demand new skills, namely the ability to build a shared vision, to bring to the surface and to challenge prevailing mental models, and to foster more systemic patterns of thinking.

In the next section, we will specifically look at the roles and requirements of leadership in municipalities committed to Quality and Organisational Excellence.

7.2. LEADERSHIP ROLES AND REQUIREMENTS IN THE LOCAL GOVERNMENT

In the Public Sector, leadership has the same degree of importance as it has in other contexts. In fact, public organisations have been stimulated to show greater leadership, seen as key to modernise public services. It is widely acknowledged that future success strongly depends on leaders' ability to build a culture of continuous improvement.

Local Government, like other areas of the Public Sector, increasingly faces a changing external environment that brings a range of new opportunities and problems for both officers and elected members (politicians).

One main difficulty in analysing leadership in public organisations and, in the Local Government in particular, concerns the co-existence of a political and a managerial leadership. It is often stressed that co-operation between them is essential (Ingraham *et al.*, 2000). However, there is little discussion in the literature about the role of political leaders and appointees in TQM initiatives (Ingraham, 1995).

In the Portuguese municipalities, two types of leaders must be considered: elected members (who form the executive board) and top appointed officials (who are in charge of different departments within the local authority). The commitment of both is essential for TQM implementation and OE.

The quality and impact of political leadership is crucial. As Painter and Isaac-Henry (1999, p. 169) note, "the effectiveness of managerial leadership is highly dependent on political leadership". On the other hand, as the New Public Management (see Chapter 1) highlights, political leaders need professional staff (including managers in the traditional sense) to effectively and efficiently attain the political ends.

Political leaders, as elected members, provide a key link between the municipality and the local community. Additionally, their trust on senior management (West *et al.*, 1993) and sensitivity to the culture and values of each local authority are crucial requisites for a successful TQM implementation.

The fact that managerial leadership is often politically appointed (Ingraham, 1995; Kaboolian, 2000; Radin and Coffee, 1993) creates additional problems in the Local

Government, especially in terms of establishing a long-term view in face of high turnover rates.

Many barriers can be overcome and resistance to change minimised if TQM implementation results from a deliberate and coherent effort of the organisation as a whole, under the leadership of a committed and determined top management team with a comprehensive and consistent implementation plan. In this regard, Lakhe and Mohanty (1994) propose the following approach:

1. Develop a vision that reflects a total commitment to quality;
2. Formulate a concise quality policy;
3. Create a total quality-oriented culture; and
4. Give structured and well-framed training to people.

In spite of cultural diversity and country-specific characteristics (Korac-Kakabadse and Korac-Kakabadse, 1998), many commonalties exist in the type of leadership associated with top-performing organisations (Dale *et al.*, 1997; Darling, 1999; Prabhu and Robson, 2000a, 2000b). Most researchers stress the importance of demonstrating long-term commitment to the process of continuous improvement. The need for listening, involving and delegating; commitment to employees; and consistency between the leadership style and the organisation's mission are also recurring principles (Ingstrup and Crookall, 1998).

Similarly, a review of the existing business excellence models reveals that leadership is essential if an organisation is to achieve superior performance. These frameworks consistently identify some key areas in which leaders are expected to concentrate their time and efforts, including (Dale *et al.,* 1997; Edgeman and Sherer, 1999): visible commitment to a culture of continuous improvement; involvement with customers, suppliers and other external constituencies; recognition and appreciation of people's achievements; and responsibility to society.

Table 7.2 summarises some key leadership competencies in an organisation committed to quality and excellence (Dale *et al.*, 1997; Dering, 1998; Holt and Rowe, 2000; Senge, 1990; Zairi, 1999). Once identified, these competencies can be used to select, develop and reward leaders in quality organisations.

Table 7.2. Core competencies of leadership in quality-oriented organisations

(Kanji, 2002)

The list of competencies above clearly shows that the implementation of TQM requires the development of new leadership profiles.

The traditional leadership model, built around the roles of leader and follower, is no more suitable in a context where employees are empowered and trusted to make their own decisions. Leaders need to accept significant role changes and a higher degree of risk to test out new ideas and thoughts (Dale *et al.*, 1997; Morgan and Murgatroyd, 1994). This

attitude corresponds to what Korac-Kakabase and Korac-Kakabadse (1998, p. 111) call 'discretionary leadership', where decisions and choices are made in a way that they are informative by an appreciation for rules, but not determined by them. As a result, leaders must be able to cope with uncertainty and the ambiguities, complexity and indeterminacy of their role. In line with the need for discretionary leaders, accountability focus must change from holding managers accountable for following rules to holding them accountable for achieving results (Korac-Kakabase and Korac-Kakabadse, 1998).

At the same time, as Korac-Kakabadse and Korac-Kakabadse (1998) point out, leaders are expected to build new relationships with the organisation's stakeholders, characterised by higher levels of involvement and decision sharing.

Overall, what is required is the development of judgement abilities so that leaders find a way to "synergy and blend (...) contradictory demands and pressures" (Korac-Kakabadse and Korac-Kakabadse, 1998, p. 114).

Jones (1999) suggests that currently senior managers in public sector organisations tend to concentrate more on divisional operational issues rather than on acting as corporate visionaries and strategists. In Australia, in 1995, the Federal Government Task Force on Leadership and Management Skills identified lack of vision and strategic management, poor teamwork, inflexibility, and poor people and self-management skills as major impediments to quality management in public organisations (Korac-Kakabadse and Korac-Kakabadse, 1998).

The same scenario applies to Portugal, where the leadership role in public organisations has been strongly constrained by norms and regulations, which tend to overshadow the importance of goals and results. Rather than addressing structural problems, the emphasis is on fragmentation and short-term, thus contributing to perpetuate bureaucracy (Lampreia, 1997). It is acknowledged that the success of Portuguese Public Administration requires an active leadership, able to motivate everyone to the organisation's mission oriented towards the satisfaction of its customers needs (Gonçalves and Monteiro, 1999).

New competencies and responsibilities emerge for leaders of TQM municipalities (Gaster, 1996; Hartley and Allison, 2000; Jones, 1999; Morgan and Murgatroyd, 1994; Rago, 1996; Skelcher, 1992a; West *et al.*, 1993):

- To communicate the organisation's values;
- To create a sense of urgency to change;
- To work across traditional boundaries and build networks;
- To develop an organisation-wide culture that solicits and values everyone's opinions;
- To trust and empower the staff;
- To ensure that important information is available to the decision-makers;
- To act as coaches (i.e. to be able to motivate without controlling and to negotiate);
- To show appreciation and recognition for employees' achievements and contributions;
- To be agents for learning, developing a culture of continuous improvement.

With the aim of determining the competencies required for local authority chief executives in the UK, Broussine (2000) conducted a research study using a qualitative inquiry approach, combining the use of focus groups and one-to-one telephone interviews. The research emphasises the limitations of the technical/instrumental rationality in a context where executives often face moral and political choices and stresses the importance of developing the capacity for "critical self understanding" and tacit knowledge based on continuous learning. Broussine (2000) concludes that competencies cannot be regarded as universal and value-free lists. From an inductive analysis of the data collected in the interviews, he identifies five (inter-related) main capacities that should be (simultaneously) developed by local authority executives:

(1) the capacity to work with the political dimension;
(2) the capacity to lead, change, and develop the organisation;
(3) the capacity for maintaining personal perspective and self-knowledge;
(4) the capacity to develop effective external relationships; and
(5) the capacity for maintaining focus on strategic and long-term issues.

In the UK, there is a complex set of relationships between elected members and career executives. In practice, elected members are essentially constituent representatives who are often unwilling to provide strategic direction and have very little executive power. In contrast, in Portugal, municipalities adopt what could be designated as a "cabinet style government" where a small number of leading elected members (among the ones who have been elected for the executive board) set strategic directions and make decisions concerning the services provided by the municipality.

The criticality of developing a political dimension among chief executives, as highlighted in Broussine's (2000) research, is particularly relevant in models of Local Government that clearly assume a distinction between political and top managerial leaders, which is not the Portuguese case. Nonetheless, at the middle-management level, the distinction is equally valid in Portugal and therefore the importance of developing a political sensibility among local authority executives.

Ingraham *et al.* (2000) stress the need of acquiring leadership talent in both political and career spheres and the value of recognising and rewarding leaders according to the levels of performance attained.

One of the main problems for a new type of leader to emerge comes from the lack of incentives in many public institutions. Acquiring, developing, and retaining critical leadership talent is particularly difficult in the Public Sector. Moreover, as discussed in Chapter 3, some of the required leadership behaviours conflict with deeply rooted bureaucratic values.

The characteristics enunciated above are not common requirements to fill top positions in the Portuguese municipalities' structures. Like it happens in the Public Sector in general, the tradition is to promote people into managerial positions, based on seniority and professional competencies, with little regard to managerial skills.

The low morale of public servants is often also an issue. The society tends to hold them in low regard and they feel pressed and unappreciated. One of the first tasks leaders need to embrace is that of developing employee pride and confidence by strengthening community connectivity and emphasising their role to the well-being of the communities they serve (Luthy, 2000).

Training in teamwork and feedback skills improves the leadership capabilities of Local Government managers (Parry, 1999). It is often stressed the need for leaders to develop new competencies in areas as community development, partnerships, networking and new technologies. However, few authorities give training in these key subjects. Therefore, it is not surprising that councillors consider they are ill-equipped to take on the roles now being demanded of them (Martin, 1997).

As shown in our exploratory survey (see Chapter 4), political leaders and top managers of the Portuguese municipalities generally recognise these problems and the need to develop new skills.

7.3. MEASUREMENT OF LEADERSHIP EXCELLENCE

An extensive literature review on leadership in the context of organisations committed to TQM and Organisational Excellence (see Kanji and Sá, 2001a) led to the identification of what we believe are the Critical Success Factors for Leadership Excellence, namely:

- the existence of strong and shared organisational values (which provide the foundation for the organisation's identity and are reflected in its mission, vision, strategy, and management practices);
- the development and communication of an inspiring vision;
- the definition of a mission that states what the organisation stands for;
- the development of a strategy aligned to the mission and vision and able to create a sustainable competitive advantage over the competitors;
- the establishment of an organisational structure and operational mechanisms that facilitate the implementation of the mission, vision, and strategy.

It must be noticed that various research studies (Korac-Kakabadse and Korac-Kakabadse, 1998) have experienced significant difficulties in statistically demonstrating a direct link between leadership behaviour and attitudes and organisational performance outcomes. This is mainly due to the number of exogenous and uncontrollable variables that have an impact on organisational performance and that restrict the leader's influence on business results.

In this section, we present a holistic model that using a structural equation modelling approach simultaneously measures leaders' performance in key roles (the CSFs identified above) and how these contribute to Leadership Excellence.

The model proposed clearly receives the influence of different leadership theories: from the classical ones to the most contemporaneous research works, as briefly discussed in section 7.1. Moreover, according to the view presented in the previous section, it also incorporates the key leadership requirements in the Local Government.

In the proposed leadership model (see Figure 7.1), the organisational values provide the foundation for the vision, mission, strategy and other key issues. The way these are developed and implemented will determine the quality of leadership in an organisation, measured by the respective Leadership Excellence Index.

Figure 7.1. Leadership structural equation model (Kanji and Sá, 2001a)

Leadership excellence converges from the core values of the municipality, which will be reflected in its vision, mission and strategy. As Younis *et al.* (1996) emphasise, public service quality is inevitably value-based. Therefore, leaders have the primary responsibility of shaping, communicating and pursuing the organisation's values.

Additionally, as Dewhurst *et al.* (1999) corroborate, leaders have the role of creating a challenging vision of the future and motivating their employees to its accomplishment.

Together, the mission and vision give direction to an organisation and function as a compass and a road map leading to better performance (Rampersad, 2001).

The development of an owned mission and vision (Rago, 1996) is the basis for organisational alignment, coordination, and teamwork. This calls attention to the leaders' role in establishing a managerial infrastructure to actually bring about change (Dale *et al.*, 1997) and implement the organisational mission, vision and strategy.

The work of Goshal *et al.* (2000) has interesting similarities with the perspective we adopt here. Basically, they also highlight the importance of developing a vision to achieve success, while emphasising that values are the basis for the vision. At the same time, they

recognise that these are not enough: management needs to bring the sense of purpose down to each employer. The main elements of their theory are part of our model. Like them, we emphasise that organisational values provide the foundation from which vision and mission emerge, but we also point out that developing a consistent strategy and managing the key issues are important to put the organisation's philosophy, purpose and vision into action. Leadership Excellence comes from the alignment and mutual reinforcement of these aspects.

As Schweickardt and Seghezzi (2000) argue, the process of defining, communicating and deploying throughout the organisation a vision, mission, goals and objectives consistent with the TQM principles is essential to its successfully implementation. Equally, Azhashemi and Ho (1999) highlight the critical importance of formulating a corporate vision, establishing strategies to realise that vision, and setting plans to link vision and strategy to daily operations.

The profile of key competencies for Local Government leaders is in accordance with the constructs of our leadership model. Moreover, as Morgan and Murgatroyd (1994, p. 166) suggest from a review of various examples of TQM implementation in the Public Sector, "the clearer the leadership (...) is about its vision, values, strategies and goals, the more likely is that TQM will develop an effective response to the problems which governments face".

Leadership Excellence is, thus, the result of an outstanding performance of leaders in all these key areas. The Leadership Excellence Index (LEI) will reflect, in quantitative terms, and through a single and integrated measure, their simultaneous performance in the roles of establishing and sharing the values, developing and communicating the vision, defining the mission, selecting and implementing a strategy, and managing other operational key issues.

Therefore, a major challenge for Local Government leaders is to effectively manage the relationships among the organisation's vision, mission and strategy and their links to the municipality's values.

Next we discuss in some detail the meaning for the Portuguese municipalities of each of the model constructs and explore some connections among them.

Organisational Values

To a significant extent, the success or failure of TQM implementation depends upon "the existence of a value set that supports change and can endure the inevitable tumult it will cause" (Ingraham, 1995, p. 251). The creation and maintenance of an appropriate set of values is the prime responsibility of a strong leadership.

Values reflect an individual or collective judgement as to what is valuable or important in life, and provide a yardstick against which personal, organisational and societal behaviour can be evaluated (Kenny, 1994).

Values form the culture of an organisation and will be reflected in its mission and vision. They will also influence the courses of action taken to achieve these ends, i.e., the organisation strategy.

Thus, organisational values guide the definition of Quality and Excellence to the municipality. At the same time, they provide a basis for creating the vision, defining the mission, and establishing the strategy.

Leadership commitment to TQM values is crucial (Durant and Wilson, 1993). In order to sustain organisational excellence, quality needs to be embedded in a set of core values that can survive to party changes associated with the political nature of local authorities (Cooke, 1992).

Effective leaders must be 'in touch' with dominant values and create momentum to make things happen (Korac-Kakabadse and Korac-Kakabadse, 1998).

We believe that leaders have a crucial role in defining and communicating the organisational values, but, at the same time, the organisation's values also have an impact on the type of leadership that fits a particular municipality at a given moment.

Because public values are clearly important to a municipality, its leaders must embrace the public service ethos and understand the range of needs existent across the local community as a whole.

In the Public Sector, there are different kinds of values that have influence on the way the Local Government organisation operates (Gaster, 1995). First, there are political values,

which guide the work of the Board or Council. Then, there are management values, which can be in contrast with the first ones. Professional values also have often an important impact. Finally, consumers and citizens bring with them a highly variable set of values.

Within the range of the political values that influence the nature, level and method of service delivery, the most common, as identified by Skelcher (1992a), are:

- utilitarianism - public actions should be directed towards the greatest good to the greatest number;
- libertarianism - people should be free to make their own choices within a minimal governmental framework;
- redistribution - to each according to their need; from each according to their ability;
- social justice - resources should be redistributed in such a way that the least advantaged members of society are not made worse off;
- constrained inequality - accept the existence of service inequalities but only within specified limits;
- filtering down - resources should be concentrated on centres of excellence, rewarding the successful and encouraging others to attain improvements.

The list above is not exhaustive and new values have been introduced in the last decades.

As societies become more and more aware of environmental problems, these are likely to rank higher and higher on public organisations concerns, which will tend to judge their activities for their effect on both the quality of life of the communities they serve and the sustainability of the physical environment.

Responsiveness and sensitivity to people's differences have more recently emerged as public values. In the past, standardisation used to be justified on the grounds that "it is fair to treat everyone in the same way" (Gaster, 1995). However, it is now recognised that treating everyone in a standard way can, in fact, be very unfair. People's real needs differ enormously, and they react to similar treatments in quite different ways. This inevitably leads to flexibility, choice and variation. The question is how to balance these new values with the old ones of fairness and equity (Ingraham, 1995; Gaster, 1995). Thus, while the development of service quality involves thinking about the customer as an individual, it is also essential to consider him/her as a member of particular groups.

The Local Government Management Board 1991 (mentioned in Skelcher, 1992a) offers some guidelines for integrating 'old' and 'new' public sector values:

- recognise the needs specific to each customer;
- ensure that the service package is designed from the perspective of all groups of customers;
- conceive means of collecting information that reach the whole community;
- design ways to provide information that is appropriate to different groups of customers;
- establish consultation and decision-making processes which enable less powerful groups to be actively involved;
- establish equality and quality as core values for managers and policy-makers.

Yet, sometimes tensions are inevitable between managerial and political values (Gaster, 1995).

To be effective in generating a clear sense of mission and purpose, organisational values must reflect the realities of each particular community (Benington and Taylor, 1992). They provide a foundation for the participation and involvement of all stakeholders.

Making the local authority more responsive and proactive requires empowerment at all levels, including enlarging and reinforcing the responsibilities of local government managers and directors. Shared values inspire commitment, loyalty, and devotion in all parts of the organisation (Rampersad, 2001). Providing that strong values and purposes exist and are shared, managers and staff members can be given greater discretion over the way resources are used to achieve the goals. Clearly, this also assumes that managers and top officers become more accountable for the results of their actions.

Leadership behaviours have a decisive effect on turning the espoused values in actual values (Cooke, 1992). This view is shared by Peters and Waterman (1982), who further reinforce the importance of leaders clearly and continuously communicating the organisational values. There must be a commitment and role model attitude from the leadership. As Jones (1999) emphasises, if a climate of trust is to be created, leader's integrity is essential, meaning that a leader should always keep his/her word, deliver the promises and constantly *'walk-the-talk'*.

To sum up, in this dimension, we measure leaders' performance in addressing and promoting values, looking at the following aspects:

- Leaders identify and communicate the core values of the municipality to all its stakeholders;
- Organisational values serve as guiding decision-making principles that leaders follow and promote;
- Leaders put in place reinforcement systems consistent with the municipality's values and principles.

Mission

Leadership holds the fundamental responsibility of providing guidance and ensuring that the whole organisation is striving towards a common purpose.

The mission encompasses the identity and core competences of an organisation and indicates the nature of the business it is in, for whom it exists, why it exists, and what its primary goal is (Bart *et al.*, 2001; Rampersad, 2001; Thompson, 1997).

A few studies (Bart *et al.*, 2001) have focused on the impact of various mission constructs on employee behaviour and their collective contribution to financial outcomes. They suggest that the degree to which an organisation aligns its structure, systems and procedures with its mission has a strong impact on performance in general and on employee behaviour in particular.

The existence of a clear mission statement is an important element for achieving consistency of purpose, giving focus to day-to-day activities and reducing uncertainty (Bart *et al.*, 2001; Clark and Appleby, 1997).

Our model suggests that missions are value-driven. The mission summarises the reasoning and values that lie behind it (Lynch, 2000). This view is corroborated by Benington and Taylor (1992), who argue that, in Local Government, mission statements have to be driven by both political and managerial values.

Leaders must formulate a mission that drives decision-making at all levels. To build a consensus around the mission is very important. As Ingraham (1995, p. 247) emphasises,

"as political consensus about the organizational mission declines, the ability to arrive at measures of quality and success that are widely accepted declines as well". A coherent mission statement brings organisational members together to work towards a collective purpose (Smith, 1993).

The concept of corporate citizenship (Sureshchandar *et al.*, 2001) is expected to be at the core of a municipality's mission, since it mainly exists to improve the quality of life of its local community.

Once the mission is formulated, it must be communicated and disseminated to all employees. Poor communication jeopardises coordination and reduces organisational effectiveness and efficiency.

From the mission, clear goals can be established. Goals provide important references to set priorities and allocate resources (Kaboolian, 2000). In high performing organisations, missions are used as basis for long-term planning and as guidelines to organise daily activities.

Within this construct, we measure at what extent leadership:

- Defines what the municipality stands for; and
- Generates trust, enthusiasm, and commitment among organisational members for the chosen purpose.

Vision

The vision reflects the values upon which an organisation is based. On the other hand, it provides a link between these values and everyday events (Georgiades and Macdonell, 1998). As Rampersad (2001) stresses, the vision encompasses a long-term dream and indicates the transformational path necessary to accomplish it.

Accordingly, a vision can be defined as a "mental image of a possible and desirable future state of the organisation" (Bennis and Nannus, 1997). This image must be understood and communicated throughout the organisation (Thornberry, 1997), so that it gives direction to personal efforts and releases energy and creativity (Rampersad, 2001).

The transformational view of leadership (see section 7.1) puts this dimension at the core. The leadership role in creating and sustaining a compelling vision has been highlighted by many researchers (Bennis and Nannus 1997; Cardona, 2000). Leaders need to share the vision – communicating and gaining support for the suggested view of the future –, and to be persistent and consistent in delivering it (Korac-Kakabadse and Korac-Kakabadse, 1998). This means leaders must be able to develop a simultaneously inspiring and realistic vision, while being credible in communicating and implementing it.

Once again the role model of leaders in conveying the vision is highlighted. Credibility needs to be a major concern. The willingness to adopt innovations will strongly depend upon the perception Local Government actors have of politicians and managers as credible leaders (Gabris et al, 2000).

Trust reduces stress and fear. It is a prerequisite for honesty and openness, which in turn are essential conditions of organisational learning (Ingstrup and Crookall, 1998).

In conclusion, as suggested by Bennis and Nanus' (1985) study (mentioned in Morden, 1997), in this dimension we access leaders' ability to:

- Create a vision that others can believe in and adopt as their own;
- Align the vision with the municipality core values;
- Communicate that vision effectively;
- Translate the vision into practical actions and visible behaviours; and
- Inspire confidence in the vision creating a climate of trust.

Strategy

Strategies are means to pursue the organisation's purpose and overall objectives (Lynch, 2000).

Strategic objectives are derived from organisational values (Gaster, 1995; Rampersad, 2001). Moreover, by establishing the overall aim and image of the future, the organisational mission and vision also form the basis for developing the strategy and defining objectives and performance indicators.

Therefore, strategy definition and implementation must ensure that all the municipality's activities and policies are contributing towards its mission and values. Major gaps need to be identified and possible courses of actions analysed to ensure consistency and alignment.

Leaders are also responsible for cascading the strategy throughout the organisation, through the establishment of operational plans and concrete projects.

Customers' and local government employees' participation should be encouraged, since it facilitates strategy implementation by gaining support to the necessary changes.

Within this dimension, we measure at what extent leadership:

- Develops consistent strategies and policies and deploys them throughout the organisation;
- Has a proactive attitude, anticipating changes and helping the organisation to deal with them; and
- Implements an appropriate performance system to monitor strategy implementation and review.

Key Issues

Leaders need to work on key issues that support the accomplishment of the mission, vision, and strategy.

Management practices are linked to the core values and essentially constitute the action-oriented behaviours that bring them to life (Georgiades and Macdonell, 1998).

It is not enough to develop and communicate a vision; nor it is sufficient to state the purpose of the organisation and then conceive a consistent strategy. Leaders have to accomplish several day-to-day activities and establish mechanisms that put into operational terms what was stated in the mission, envisioned in the vision and necessary to carry out the organisation's strategy. Thus, in the Key Issues dimension fundamentally deals with the transactional leadership roles.

For mission, vision, and strategy to be pursued effectively a wide range of internal conditions must be in place. These so-called more operational aspects of leadership, as opposed to the more transformational roles described earlier, include (West *et al.*, 1993):

- to develop appropriate metrics to monitor the achievement of strategic and operational goals;
- to devise reward structures and recognitions schemes that promote customer service, innovation, and continuous improvement;
- to provide training and education, especially on quality techniques and tools;

Leaders in public sector organisations need to design organisational structures that can successfully cope with the new demands, eliminating or minimising inherent bureaucratic inefficiencies and maximising the organisation's ability to control the resources needed to better serve the stakeholders (Korac-Kakabadse and Korac-Kakabadse, 1997).

Within the more operational leadership roles, we assess the following aspects:

- The organisational structure is aligned with the municipality's values, mission, vision and strategy and effectively support their accomplishment;
- Staff at all levels are given authority, responsibility and support to make decisions and take actions, using the organisational values as a frame;
- Co-operative and partnership relationships are established with peers, subordinates and other stakeholders (citizens, suppliers, and other governmental institutions) to facilitate the implementation of the vision, mission and strategy.

7.4. MODEL VALIDATION AND TESTING

The following hypotheses underlie the structural model presented in Figure 7.1 (page 213):

- H1: The degree to which the municipality's values are clearly specified and shared among the organisational members will positively affect the development of the organisational vision (H1-A), the establishment of the mission (H1-B), the definition and implementation of the strategy (H1-C), the consistency of management practices (H1-D) and, thus, ultimately, lead to leadership excellence;

- H2: The degree to which there is a challenging and credible vision, communicated and embraced by all local government members will positively affect leadership excellence;

- H3: The degree to which it is known what the organisation stands for and how people can contribute to the mission will have a positive impact on leadership excellence;

- H4: The degree to which a consistent and proactive strategy is developed and implemented throughout the organisation will have a positive impact on leadership excellence;

- H5: The degree to which management practices and systems are in place to operationalise the mission, vision and strategy and reinforce them on a daily basis will positively affect leadership excellence.

Finally, it can be added the proposition that the degree of alignment and consistency among the model constructs has a strong impact on leadership excellence.

Given the interdependency among all these dimensions and the fact that they cannot be directly measured, but rather need to be represented by a set of indicators (or manifest variables), structural equation modelling (see Chapter 5) was used to validate and test the proposed leadership model.

7.4.1 The Leadership Excellence Questionnaire

Based on an extensive literature review, a set of indicators was selected to measure each of the model dimensions (see Table 7.3).

The final leadership questionnaire (see Appendix C) includes 18 questions/statements. Respondents (both leaders and staff members, as described next) were asked to indicate in a 1 to 10-scale the degree to which they agreed with each statement.

Construct	Measurement items
Organisational Values (OVAL)	• Development of shared values and meanings (SHARED) • Value-based decision making (VALBDM) • Existence of reinforcement systems consistent with the organisational values (VALREINF)
Vision (VISION)	• Creation of a compelling and challenging vision (VISCHAL) • Effective communication of the organisational vision (VISCOM) • Development of trust and confidence in the vision (VISTRUST)
Mission (MISSION)	• Identification of the organisation's purpose (MIDENT) • Commitment for the chosen purpose (MCOMMIT)
Strategy (STRAT)	• Development of consistent policies and strategies (POLSTRAT) • Change anticipation and guidance (CHANGE) • Performance monitoring and strategy review (MONREV)
Key Issues (KI)	• Organisational structure alignment (ALIGNST) • Empowerment (EMPOWER) • Co-operation and partnership building (PARTNER)
Leadership Excellence (LEX)	• Accessibility and listening skills (ACCESS) • Organisation members involvement (INVOLVE) • Continuous improvement and innovation (CINOV) • Benchmarking and learning attitude (BENCH)

Table 7.3. Leadership constructs and associated measurement items

7.4.2. The Sample

The leadership questionnaire was sent to all Portuguese municipalities along with the KBEM questionnaire. Eighty-five successfully completed questionnaires were returned, corresponding to a 28% response rate. The profile of the respondents is shown in Table 6.2 (page 175).

As explained in section 6.2.2, the questionnaires were either directly sent to the mayor or to the contact person provided in the preliminary survey. The exploratory study had shown that questionnaires were in the vast majority of the cases completed by the mayor or a councillor and, in some instances, by the head of the general administration division. Therefore, it is possible to conclude that, as a rule, it is the leaders' perspective (and in particular the political leadership view) that we gathered through this approach.

With the aim of complementing leaders' views with employees' perceptions, an additional study was conducted in three municipalities. For the reasons explained in section 6.2.2 it was not possible to get a wider participation. The sample consists of staff members of these three different municipalities working on a full-time basis. Data was obtained with the agreement of the heads of the departments and the questionnaires were completed and collected on a confidential basis. This resulted in seventy usable questionnaires. Job profiles essentially include office work and technical services. In some cases, questionnaires were returned unanswered either because some staff members felt they could not offer feedback on the topic, or because they were uncomfortable with filling out the survey. It would be recommended to have a large sample size to conduct a more comprehensive and valid analysis, but time constraints and, specially, difficulties of access did not make that possible.

7.4.3. Process of Validation, Testing and Estimation

Figure 7.2 depicts the measurement model to be tested and validated. The symbols used were described in section 6.2.3 (see pages 175-176).

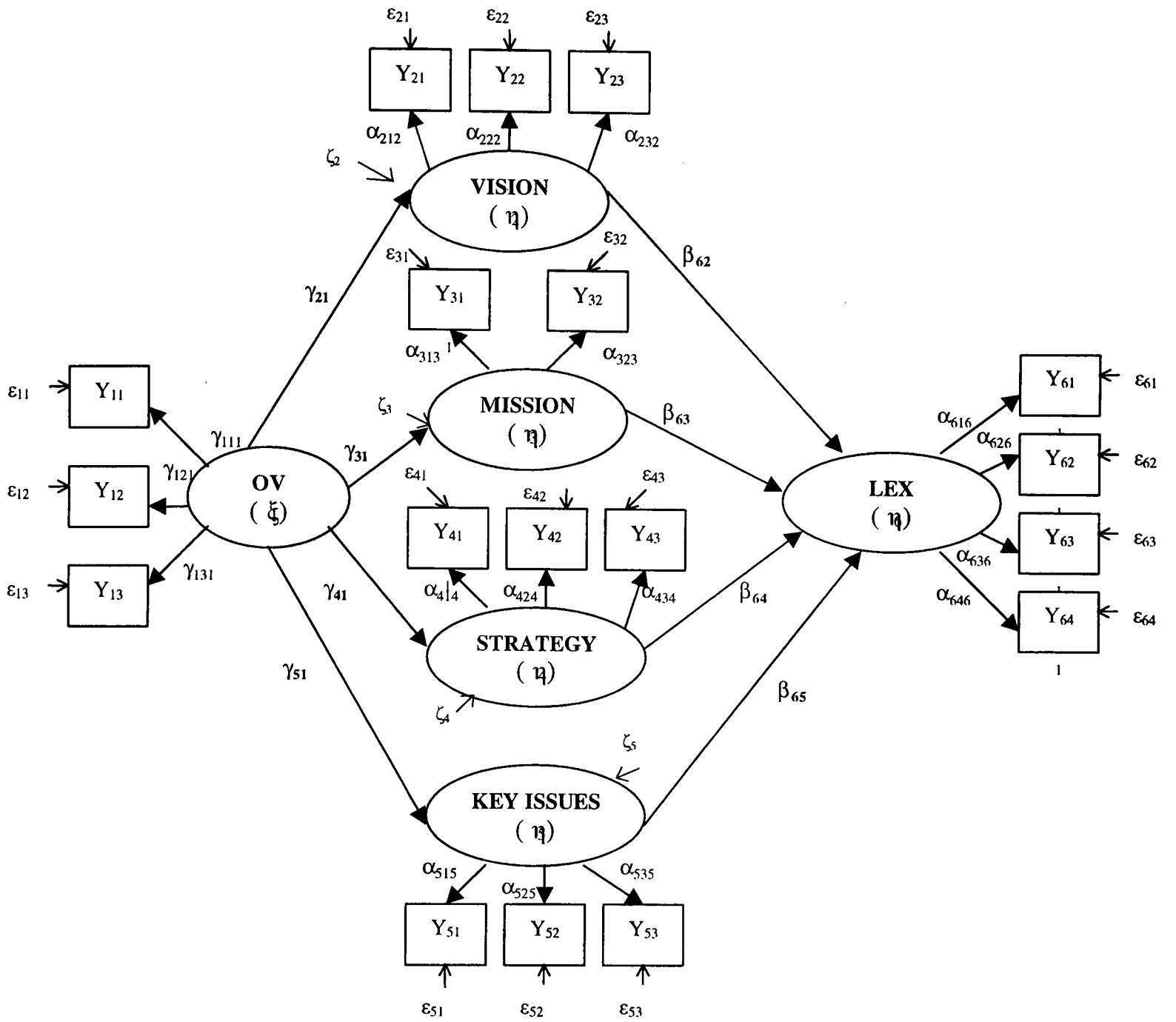


Figure 7.2. Latent variables structural model for Leadership Excellence in the Portuguese municipalities

A structural equation analysis using PLS was performed for the general municipalities sample and to the data collected in the additional study carried out in three municipalities.

The multiple-item scales developed for each latent variable were inspected for validity and reliability. Following this assessment, the proposed hypotheses were validated and the ability of the model to explain leadership excellence in the Portuguese municipalities investigated.

The final index values for the different latent variables (including the Leadership Excellence Index) were calculated according to the following formula (Kanji, 1998):

$$Index = \frac{\sum w_i \bar{x}_i - \sum w_i}{(n-1)\sum w_i} \times 100$$

where

n = number of points on the scale

w_i s = weights of individual manifest variables for all latent variables

$\bar{x}_i$ s = means of individual manifest variables for all latent variables.

7.5. RESULTS AND FINDINGS

The leadership model was tested and validated using data collected from the Portuguese Municipalities.

According to the approach followed, the validity of the measurement model was checked first and then the structural model results were interpreted.

Since, as explained in Section 7.4.2, the institutions' responses are essentially given by their top political leaders, some bias is expected. Not only is important to know how leaders assess themselves, but it is also essential to understand how other organisational members (the staff in the broadest sense) regard their leaders' performance. Major perception gaps must be carefully addressed as they may indicate communication and image problems. Therefore, in a small-scale project, involving three municipalities, the measurement of leadership excellence from the leaders perspective was supplemented with the analysis of questionnaires collected from staff members. Section 7.5.2 reports the results of this additional study.

7.5.1. Data Analysis for the Portuguese Municipalities

- Mean, Standard Deviation and Normality Analysis

Table 7.4 provides a summary of descriptive statistics for each questionnaire item.

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test	
				Statistic	Sig.
OVAL	SHARED	6.56	1.672	.925	.000
	VALBDM	7.74	1.597	.883	.000
	VALREINF	7.14	1.684	.941	.001
VISION	VISCHAL	7.64	1.654	.929	000
	VISCOM	6.88	1.714	.945	.001
	VISTRUST	7.42	1.621	.926	.000
MISSION	MIDENT	7.68	1.605	.874	.000
	MCOMMIT	7.12	1.749	.894	.000
STRAT	POLSTRAT	7.27	1.584	.913	.000
	CHANGE	6.88	1.665	.927	.000
	MONREV	6.73	1.954	.948	.002
KI	ALIGNST	6.89	1.559	.953	.003
	EMPOWER	6.40	1.941	.949	.002
	PARTNER	6.67	1.762	.949	.002
LEX	ACCESS	7.62	1.690	.932	.000
	INVOLVE	7.01	1.749	.957	.007
	CINOV	7.20	1.805	.949	.002
	BENCH	7.33	1.748	.940	.001

Table 7.4. Item statistics

The mean scores for the different questions range from 6.40 to 7.68 (in a 1 to 10 scale), thus being visibly positive. The items covering the *mission* construct present particularly high scores, especially that regarding the identification of the municipality's purpose. On the other hand, more operational aspects, which are part of the *key issues* dimension, consistently display lower scores, reflecting the difficulties political leaders, in particular, have in assuming those roles.

Data was tested for normality using the Shapiro-Wilk test. Results show (see Table 7.4) that we cannot assume the variables are normally distributed. This gives an additional

argument to use PLS, which, as explained in Chapter 5, does not require normality assumptions.

- Item Correlation Analysis

The Pearson-correlation matrix between the manifest variables is presented in Appendix C - Table 1. It shows that all correlations are positive and significant at $p<0.01$. This situation is not surprisingly, given the interdependency between the different leadership roles.

- Reliability and Validity Analysis

Traditionally, researchers using PLS have generally reported one or both of two measures of reliability: Cronbach's alpha and an internal consistency measure developed by Fornell and Larcker (Hulland, 1999).

As explained in Section 5.1, correlations and Cronbach-alpha coefficients are used in this research as indirect indicators of convergent validity, since they reflect the degree of cohesiveness among the scale items.

The process of scale refinement was similar to that described in Chapter 6. Scales were strongly based on the literature and reviewed by a small panel of experts to enhance content validity. To ensure that only variables that are in fact linked to the construct they intend to cover are retained for further analysis, measurement items with outer coefficients below 0.1 are in principle removed (see justification in page 180), unless there is a strong theoretical justification to do otherwise. Accordingly, two items - VLABDM and EMPOWER – were removed from the initial scales. As emphasised earlier (see page 181), this does not mean these aspects are not important for leadership excellence. On the contrary, it probably points to aspects that are not being sufficiently practised. After this procedure, all outer coefficients (see Table 7.5) are positive and significant.

Item	OV	VISION	MISSION	STRAT	KI	LEX
SHARED	0.40604					
VALREINF	0.71338					
VISCHAL		0.12666				
VISCOM		0.42211				
VISTRUST		0.51485				
MIDENT			0.54245			
MCOMMIT			0.55298			
POLSTRAT				0.28139		
CHANGE				0.22870		
MONREV				0.56533		
ALIGNST					0.48660	
PARTNER					0.61688	
ACCESS						0.23755
INVOLVE						0.26702
CINOV						0.28005
BENCH						0.27838

Table 7.5. Outer coefficients after scale refinement

Moreover, the scales appear to be valid and reliable (see Table 7.6).

Construct	Mean	S. D.	Cronbach alpha	Average inter-scale correlation	Average item correlations	
					Scale items	Non-scale items
ORG. VALUES	6.85	1.678	0.7205	0.7088	0.5631	0.5832
VISION	7.31	1.663	0.9262	0.7646	0.8075	0.6565
MISSION	7.40	1.677	0.7983	0.7410	0.6667	0.6222
STRAT.	6.96	1.734	0.9141	0.7591	0.7927	0.6678
KEY ISSUES	6.78	1.660	0.7750	0.7195	0.6374	0.6161
LEAD. EXC.	7.29	1.748	0.9562	0.7384	0.8453	0.6350

Table 7.6. Measure characteristics

As Nunnally (1967) recommends, Cronbach-alphas are above 0.7 for all constructs, thus strongly suggesting that the scales are internally consistent. Additionally, Table 7.6 also provides evidence of convergent and divergent validity, since, as proposed by Flynn and Saladin (2001), Cronbach-alpha exceeds in every case average inter-scale correlations

(showing convergence) and, with the exception of the *Organisation Values* construct, items that belong to the same construct have stronger correlations among themselves than they do with others associated with distinct constructs (indicating divergence).

We can therefore conclude that the measurement model is valid and reliable.

- Path Analysis

The path coefficients represent the causal links from one construct to another (see Figure 7.3).

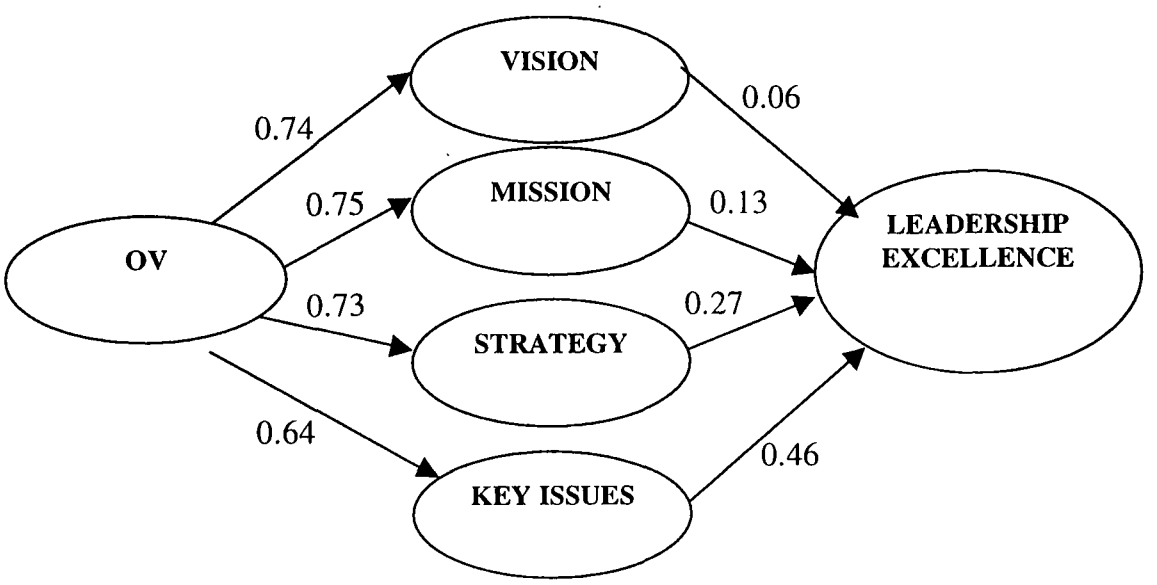


Figure 7.3. Leadership path diagram

Direct path coefficients (or inner coefficients, in the PLS terminology) indicate the amount of influence (in unitary terms) a change in one latent variable would have on the next. Therefore, they give important indications about possible improvement strategies and are at the core of the Leadership Excellence Seeker's Approach (see Section 7.6). Changes in *Organisational Values* will evidently have also an impact on Leadership Excellence through the indirect paths.

The structural path coefficients in Figure 7.3 are all positive and in the predicted direction. To assess their significance, the traditional t-tests were used. The t-values are calculated by dividing the inner coefficients by the standard error. Based on these results, it is possible to analyse whether to accept or reject, for a particular significance level, each of the hypotheses of the Leadership Model (see Table 7.7). It must be noticed, however, that the

t-test assumes normal distributions, which are not a requisite to apply PLS[10]. Results also have to be interpreted with some care, since we are testing each hypothesis in isolation, whereas the reasoning behind SEM calls for a simultaneous interpretation of all paths.

	Path	β	SD	t-statistic	Valid*
H1-A	OV ➜ VISION	0.7424	0.0735	10.0965	✓✓✓
H1-B	OV ➜ MISSION	0.7467	0.0730	10.2261	✓✓✓
H1-C	OV ➜ STRATEGY	0.7290	0.0751	9.7016	✓✓✓
H1-D	OV ➜ KEY ISSUES	0.6429	0.0841	7.6467	✓✓✓
H2	VISION ➜ LEX	0.0636	0.1280	0.4967	-
H3	MISSION ➜ LEX	0.1270	0.1077	1.1787	-
H4	STRATEGY ➜ LEX	0.2742	0.1287	2.1817	✓✓
H5	KEY ISSUES ➜ LEX	0.4604	0.0972	4.7383	✓✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 7.7. Validation of hypothesis testing

As shown in Table 7.7, the majority of the paths are significant and six out of the eight proposed hypotheses are valid at $p < 0.05$. For the remaining two, although coefficients are positive they are not strong enough to be statistically significant.

	OV	VISION	MISSION	STRAT	KI	LEX
OV	1	0.7424	0.7467	0.7290	0.6429	0.6830
VISION		1	0.8198	0.8398	0.7004	0.7204
MISSION			1	0.7528	0.6850	0.7009
STRAT				1	0.7792	0.7819
KI					1	0.8056
LEX						1

Table 7.8. Correlation matrix among latent variables

[10] Bontis (1998) presents in his research an alternative - jackknife analysis, which was performed using a program developed by Fornell and Barclay. This method has advantages for testing the significance of parameter estimates from data which are not assumed to be multivariate normal. However, in this research it was not possible to use the method due to the difficulty in finding software able to perform the analysis.

The correlation matrix among the latent constructs (see Table 7.8) shows that the leadership dimensions are strongly correlated. This indicates that the CSFs of leadership excellence are considerably integrated. It is also important to notice that the main driver – *Organisational Values* – is significantly correlated with *Vision*, *Mission* and *Strategy*, though only moderately correlated with *Key Issues*, showing that leaders are not being very effective in translating the organisational values into important transactional practices. Correlation values additionally confirm that the CSFs proposed are indeed considerably associated with Leadership Excellence.

To assess the goodness-of-fit of the model, the values of R^2 are examined (see Table 7.9). They indicate the percentage of variation in the endogenous constructs accounted for by the variables involved in each structural equation. Overall, the model explains 72% of the variation in Leadership Excellence.

Endogenous construct	**Number of items**	**R^2 %**
Vision	3	55.1
Mission	2	55.8
Strategy	3	53.1
Key Issues	2	41.3
Leadership Excellence	4	72.0

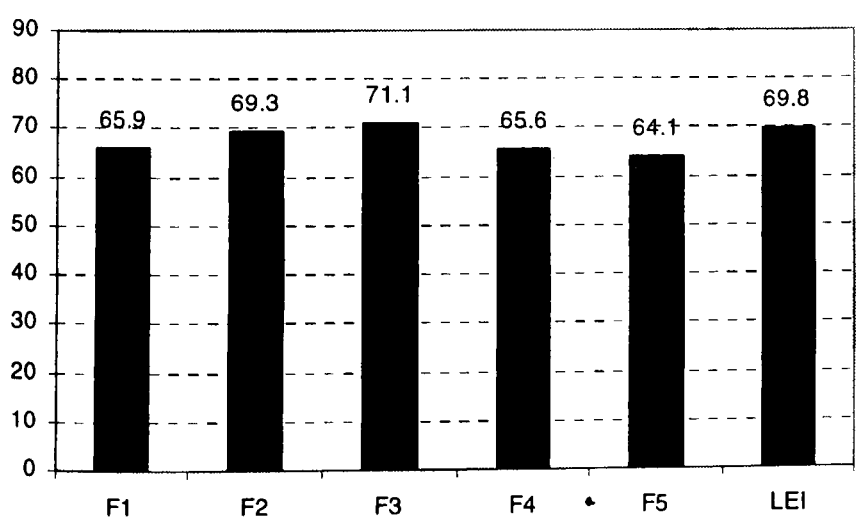
Table 7.9. R^2 statistic for each endogenous construct

Given these results and the fact that most structural parameters are meaningful and statistically significant, we can conclude that the structural model proposed provides a plausible representation for the data.

Table 7.10 shows the details of the indices calculation and Figure 7.4 displays the resulting scores for the various CSFs and Leadership Excellence.

	1	2	3	4	Σ	Index
ORGANISATIONAL VALUES (SHARED, VALREINF)						
w_i (weight)	0.4060	0.7134			1.1194	
x_i (mean)	6.56	7.14				
$w_i\ x_i$	2.6634	5.0937			7.7571	
						65.9
VISION (VISCHAL, VISCOM, VISTRUST)						
w_i (weight)	0.1267	0.4221	0.5149		1.0637	
x_i (mean)	7.64	6.88	7.42			
$w_i\ x_i$	0.9680	2.9040	3.8206		7.6926	
						69.3
MISSION (MIDENT, MCOMMIT)						
w_i (weight)	0.5424	0.5530			1.0954	
x_i (mean)	7.68	7.12				
$w_i\ x_i$	4.1656	3.9374			8.103	
						71.1
STRATEGY (POLSTRAT, CHANGE, MONREV)						
w_i (weight)	0.2814	0.2287	0.5653		1.0754	
x_i (mean)	7.27	6.88	6.73			
$w_i\ x_i$	2.0458	1.5735	3.8045		7.4238	
						65.6
KEY ISSUES (ALIGNST, PARTNER)						
w_i (weight)	0.4866	0.6169			1.1035	
x_i (mean)	6.89	6.67				
$w_i\ x_i$	3.3527	4.1147			7.4674	
						64.1
LEADERSHIP EXCELLENCE (ACCESS, INVOLVE, CINOV, BENCH)						
w_i (weight)	0.2375	0.2670	0.2800	0.2784	1.0629	
x_i (mean)	7.62	7.01	7.20	7.33		
$w_i\ x_i$	1.8098	1.8717	2.016	2.0407	7.7382	
						69.8

Table 7.10. Index calculation



F1. Organisational Values

F2. Vision

F3. Mission

F4. Strategy

F5. Key Issues

LEI. Leadership Excellence Index

Figure 7.4. Indices of CSFs and Leadership Excellence

Based on these research findings, it is possible to draw several conclusions about the municipalities' performance on the five key areas of the Leadership Excellence Model:

- Overall, leadership excellence in the Portuguese municipalities is relatively good, since the scores for all critical success factors range from 64% to 71%, resulting in a leadership excellence index (LEI) close to 70%;
- Organisational values are strongly related to the remaining model constructs, demonstrating how crucial the leaders' role is in the development and communication of sharing meanings and interpretations of reality;
- It seems to be also in place a compelling and challenging vision;
- The score achieved in the mission dimension is particularly high, showing the leaders' ability to identify the municipality's overall purpose and enunciate its main projects;
- Leaders consider they have an appropriate strategy, anticipating and guiding change, though some problems are reported in monitoring performance and using the feedback to review the strategic choices;
- The key issues dimension is pushing down the LEI score. Leaders recognise that staff empowerment is not very high and that partnerships are not always conveniently developed.

7.5.2. Small-scale Study for the Integrated Measurement of Leadership

The main aim of this study is to complement the leaders' self-assessment (as reflected in section 7.5.1) with the views of other local government officers. This integration is important to ensure that measurements are unbiased and reflect the municipalities' reality as a whole.

With this purpose, data was collected from staff members. Ideally, all 85 municipalities would be represented in this study. However, as explained before, this was not possible. Yet, we believe that this small-scale study, involving seventy questionnaires collected in three municipalities, can give important insights into possible divergences between leaders and staff perceptions, contributing to a more realistic view of leadership performance in the Portuguese municipalities.

In order to obtain a rough estimate of the characteristics of this small sample of three municipalities in relation to the eighty-five municipalities that participated in the general study, the means for each CSF are compared in Table 7.11.

	OV	VISION	MISSION	STRATEGY	KI	LEX
MEAN VALUES (3 MUN)	74.4	75.6	76.7	75.6	72.2	72.5
OVERALL (85 MUN.)	71.5	72.2	74.0	69.6	66.5	72.9

Table 7.11. Comparative assessment of the small sample

One can notice that the scores for this sample, with the exception of the *leadership excellence* dimension, are slightly above those of the overall set of 85 municipalities. However, in a hundred-percent scale the mean difference is only of 4 points, and in terms of the final LEI the disparity is insignificant. In any case, we would expect that the municipalities willing to take part in this study would be the ones whose performance is above the average.

For each of the three municipalities analysed, Table 7.12 shows the mean values (in percentage) obtained in each CSF and Leadership Excellence.

Leadership dimensions and Leadership Excellence	**Municipality A**	**Municipality B**	**Municipality C**
Organisational Values	61	52	55
Vision	60	60	67
Mission	65	49	65
Strategy	66	53	56
Key Issues	61	40	48
Leadership Excellence	64	46	57

Note: The scores correspond to simple means according to the measurement items associated with each construct

Table 7.12. Mean values for CSFs and Leadership Excellence by Municipality

Not surprisingly, there are some differences between the municipalities. According to its staff perceptions, Municipality A has very similar scores in the different CSFs, resulting in a mean around 64% for Leadership Excellence. Staff members from Municipality B

consider it has a challenging vision and a good strategy, but that leaders have considerable problems in getting commitment for the chosen purpose and, in particular, in managing on a daily basis according to the defined vision and strategy, leading to a Leadership Excellence of 46 points only. Finally, leaders in Municipality C are not doing enough for the development of shared values and have difficulties in putting the mission, vision and strategy into action, impeding Leadership Excellence to go beyond 57 points.

A more detailed analysis (question by question) is not shown by confidentiality reasons. However, in spite of each municipality particularities, some commonalties exist (see also Table 6 in Appendix C). Mission identification and the existence of a challenging vision emerge as major strengths. On the contrary, aspects such as empowerment and partnerships represent main problems.

Table 7.13 indicates that there are indeed significant differences in the mean values given by leaders and employees to each of the CSFs and Leadership Excellence.

	OV	VISION	MISSION	STRATEGY	KI	LEX
LEADERS' VIEW (3 MUN)	74.4	75.6	76.7	75.6	72.2	72.5
STAFF VIEW (3 MUN.)	56.0	62.3	59.7	58.3	49.7	55.7
DIFFERENCE OF MEANS	18.4	13.3	17.0	17.3	22.5	16.8

Table 7.13. Leaders vs. Staff Assessment

As expected, leaders' self-assessment is much higher than the evaluation made by their followers. Leaders' and staff views essential differ in the *key issues* and *organisation values* dimensions. Regarding the *vision*, the difference is considerably smaller.

When comparing leaders' and staff answers for each particular question (see Table 7 in Appendix C), interesting findings emerge:

- Lack of trust is demonstrated in several aspects. Staff members are not totally confident that leaders use the organisational principles and values to make their decisions. In addition, they agree with their leaders that the vision is challenging, but they do not

think leaders inspire confidence in it by the way they act. A credibility problem is thus visible;

- Concerning strategic issues, leaders and followers views do not fall much apart;
- Operational management practices (the *key issues*) apparently are not in line with the *vision*, *mission*, *strategy* and *organisational values*. In particular, staff members give scores under 50% to the way leaders are delegating authority and power and to their ability to develop partnerships;
- These problems may explain why staff does not feel committed to the identified mission and why there is not a collaborative environment (so necessary to foster innovation and learning).

It is also interesting to notice that, in spite of the score differences (in absolute terms), the strongest and weakest areas identified are consistent.

Due to the limited amount of data and the small scale of this study, there is no way of demonstrating the generalisability of these findings. Nevertheless, we believe that they give valuable indications for the strategies that need to be followed if leaders want to improve their performance and effectively pursue Organisational Excellence.

Next, we will use the data collected from staff in these three municipalities to test and validate the Leadership Excellence Model.

- <u>Structural Model for the Staff Data</u>

Given the purpose of this study and the reduced number of questionnaires obtained in each municipality, the structural equation analysis was only carried out for the aggregated data set.

According to the procedure described in the previous section, first the quality of the measurement model was assessed, specially looking at the correlation matrices, outer coefficients and Cronbach alpha values.

All the measurement items are positively and significantly correlated with each other, as shown in the Pearson-correlation matrix (see Table 8 in Appendix C). Once again, this gives support to the need to consider all leadership dimensions together, since the way leaders behave in a particular area has impact on the their performance in other roles and,

ultimately, on leadership excellence. As expected, the correlations are particularly strong between items that belong to the same scale.

In the process of refining the measurement model, the VALBDM item had to be removed. After that, the outer coefficients are all not only positive, but well above the cutting point of 0.1 (see Table 10 in Appendix C).

The main characteristics of the scales are shown in Table 7.14. As in last section, indications are strong that the scales are valid and reliable.

Construct	Mean	S. D.	Cronbach alpha	Average inter-scale correlation	Average item correlations	
					Scale items	Non-scale items
ORG. VALUES	5.46	2.084	0.8424	0.7213	0.7417	0.6103
VISION	6.16	2.214	0.9192	0.7072	0.7927	0.6171
MISSION	5.86	2.250	0.7977	0.7776	0.6726	0.6542
STRAT.	5.87	2.296	0.9011	0.7802	0.7549	0.6584
KEY ISSUES	4.88	2.105	0.8463	0.7396	0.6495	0.6091
LEAD. EXC.	5.54	2.372	0.9351	0.8006	0.7866	0.6751

Table 7.14. Measure characteristics (Staff data)

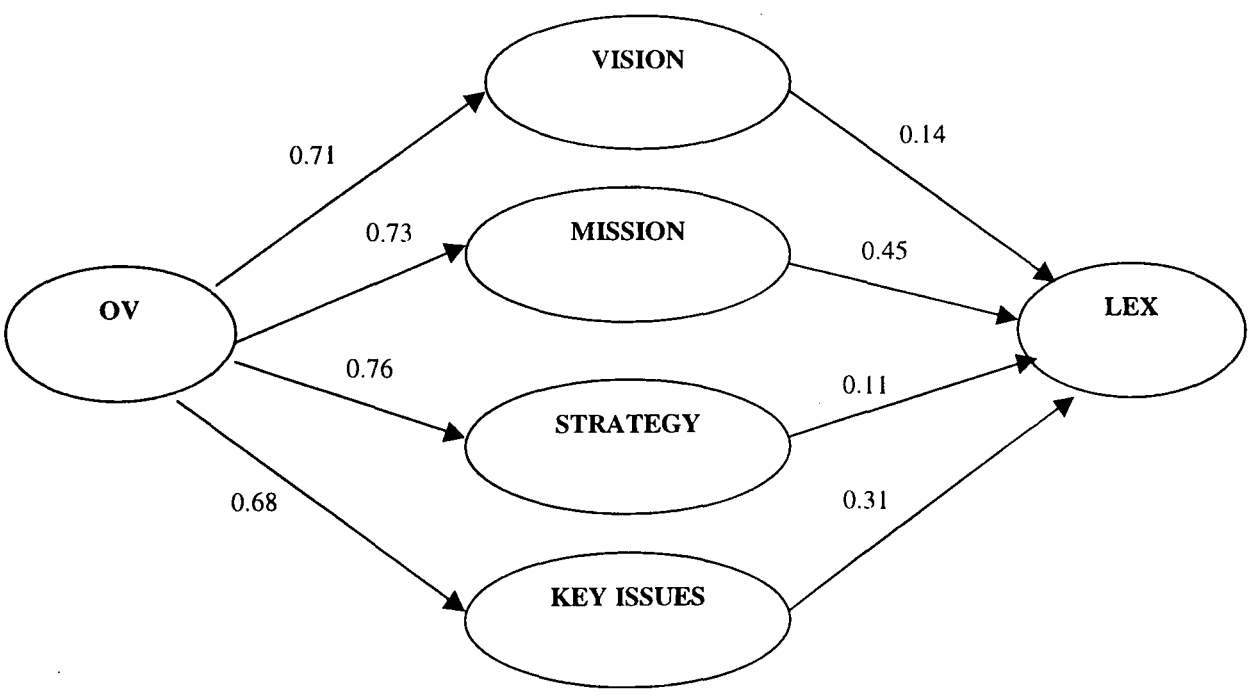


Figure 7.5. Leadership path diagram (Staff data)

Figure 7.5 shows that the structural coefficients are all positive and the links from *Organisational Values* to *Vision*, *Mission*, *Strategy* and *Key Issues* particularly strong. Thus, the holistic nature of the model and the role of *Organisational Values* as the prime are reinforced.

Consequently, according to staff data, all the hypotheses proposed are validated, with the exception of H4. Most of the causal paths are significant at $p < 0.01$, as illustrated in Table 7.15.

	Path	β	SD	t-statistic	Valid*
H1-A	OV ➜ VISION	0.7128	0.0851	8.3795	✓✓✓
H1-B	OV ➜ MISSION	0.7306	0.0825	8.8244	✓✓✓
H1-C	OV ➜ STRATEGY	0.7589	0.0790	9.6111	✓✓✓
H1-D	OV ➜ KEY ISSUES	0.6772	0.0892	7.5897	✓✓✓
H2	VISION ➜ LEX	0.1426	0.0787	1.8112	✓
H3	MISSION ➜ LEX	0.4452	0.0926	4.8060	✓✓✓
H4	STRATEGY ➜ LEX	0.1139	0.1059	1.0842	-
H5	KEY ISSUES ➜ LEX	0.3124	0.0959	3.2569	✓✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 7.15. Validation of hypothesis testing (Staff data)

	OV	VISION	MISSION	STRAT	KI	LEX
OV	1	0.7128	0.7306	0.7589	0.6772	0.7272
VISION		1	0.7746	0.6871	0.6065	0.7551
MISSION			1	0.7748	0.7347	0.8734
STRAT				1	0.8564	0.8238
KI					1	0.8233
LEX						1

Table 7.16. Correlation matrix among latent variables (Staff data)

As the inner coefficients indicate, the correlations among the latent constructs are positive and substantial (see Table 7.16). Yet, staff members consider there is not enough integration between *vision*, *strategy* and *key issues*. This essentially means that leaders are not being very effective in using the vision (that staff think is challenging) to develop and

implement consistent strategies and policies or to establish adequate management practices.

Table 7.17 displays the values of R^2 for the endogenous constructs, providing moderate indications of the model good-fit.

Endogenous construct	Number of items	R^2 %
Vision	3	50.8
Mission	2	53.4
Strategy	3	57.6
Key Issues	2	45.9
Leadership Excellence	4	84.8

Table 7.17. R^2 statistic for each endogenous construct (Staff data)

The scores for the various leadership dimensions and the final Leadership Excellence Index are shown in Figure 7.6. Details of the indices calculation can be found in Table 12 in Appendix C.

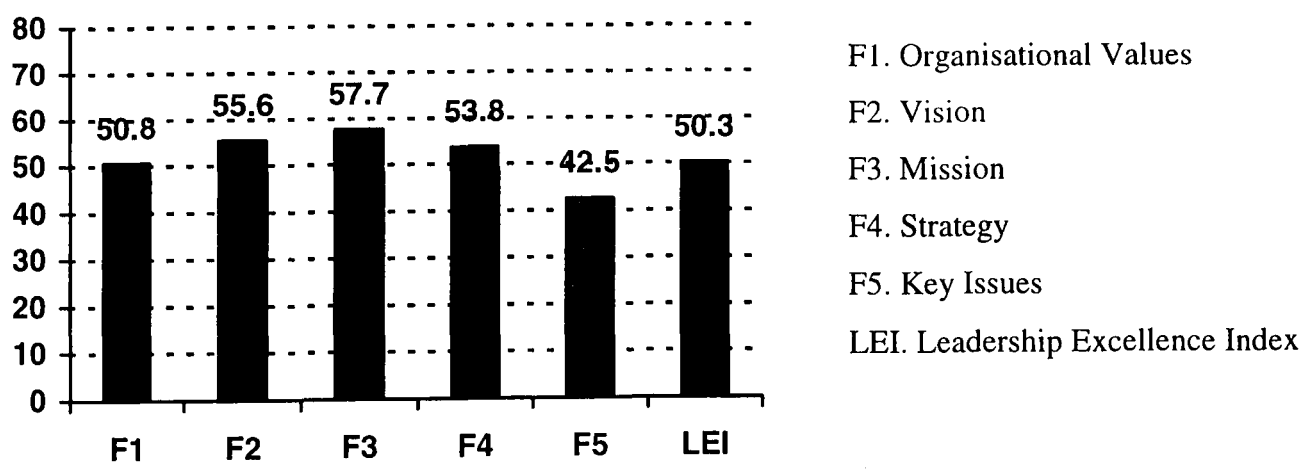


Figure 7.6. Indices of CSFs and Leadership Excellence (Staff data)

According to staff assessment, the Leadership Excellence Index for the three municipalities that participated in this study is just over 50 points.

As explained before, direct comparisons with the results obtained in the previous section for the 85 municipalities (which essentially reflect the political leaders' view) are not possible. However, if we take the take into consideration that this small sample may

represent some of the characteristics of the larger set of Portuguese municipalities (see Table 7.11), one can easily argue that leaders' perceptions are in fact inflated. In any case, *mission* and *vision* consistently emerge as major strengths. On the other hand, the *key issues* score is in both data sets low (especially in the staff's case), indicating that leaders need to concentrate their efforts on empowering their employees and creating a more collaborative environment.

As this small-scale study shows, the measurement of Leadership, to be truthful and effective, must take simultaneously into account leaders' and followers' views. In further studies, it would be recommended to extensively collect data from all organisational members and use it to validate the Leadership Model and calculate the scores for each CSF and the resulting LEI.

7.6. CONCLUSION AND RESEARCH IMPLICATIONS

This chapter described the development and validation of a model for measuring Leadership Excellence in the Portuguese municipalities.

From an exhaustive literature review, a set of Critical Success Factors for Leadership Excellence was identified (Kanji and Sá, 2001a). Based on the specific requirements of leadership in the Public Sector in general and in the Local Government in particular, these CSFs were interpreted in the context of the Portuguese municipalities.

The structural model describing the relationships among six constructs - Organisational Values, Vision, Mission, Strategy, Key Issues, and Leadership Excellence - was then tested, validated, and used to measure the performance of the municipalities' leaders.

Since these dimensions cannot be directly measured, each construct was operationalised using multiple items. The final questionnaire, comprising eighteen questions (manifest variables) was sent in the first semester of 2001 to the 308 Portuguese municipalities, resulting in 85 usable questionnaires.

Data collected from the municipalities was used to determine the correlation indexes, reliability measures and path coefficients for the overall system based on PLS estimations.

It was found that leaders are not performing equally well across the various CSFs. *Vision* and *mission* scores are particularly high, while *strategy* and *key issues* are the weakest areas. The final LEI of 69.8 points results in general from the existence of a challenging vision and a clear mission. However, it also reflects some difficulties in developing a consistent strategy and in aligning the organisational structure and management practices with the values enunciated.

Two major problems were identified:

- Insufficient development and communication of the organisation's values, mission and vision, resulting in a lack of harmony among functions and in the absence of a clear focus for improvement:
- Resistance to empowering employees, partially explained by the difficulty in finding appropriate forms of accountability, developing new motivation mechanisms, and establishing innovative rewarding schemes.

Since it was felt that the final scores for the various CSFs and LEI could be somehow inflated, and the measurement of Leadership Excellence should involve data collected from all organisational members – and not only reflect the (potentially biased) view of political leaders, as essentially captured in the general survey –, an additional small-scale study was conducted in three municipalities.

Despite the problems associated with generalising the findings of such a small-scale study, there are strong indications that leaders are not performing as well as the image transmitted in the general survey.

- Results suggest that staff do not feel sufficiently empowered and do not regard the working environment as co-operative;
- In this context, employees are not sufficiently committed to the mission and probably do not fully contribute to the overall projects of the municipality;
- Leaders seem to have some credibility problems, since the vision is seen as challenging but staff do not think leaders inspire much confidence in it by the way they act;
- On the whole, these problems are likely to be reflected in the leaders' capacity to get the involvement of all organisational members and their willingness to learn and innovate on a continual basis.

Above all, this small study calls attention to the need to measure Leadership Excellence from an integrated perspective and using feedback from employees, citizens and other stakeholders.

With the aim of investigating potential improvement strategies based on the broadest possible assessment, all the data collected was combined and used for the leadership excellence seeker's approach. Results must be interpreted with additional caution, given the discrepancy in the characteristics of the data set.

Areas that are under performing are natural candidates for improvement. However, it is also necessary to take into consideration the potential impact that resources applied in each dimension will have on the Leadership Excellence Index (as the structural coefficients indicate). As described in Chapter 6 (see page 198), the Seeker's approach essentially involves an algorithm of maximisation that takes organisational constraints into account and directs improvement efforts towards the areas that have a greater impact on the final LEI.

			Original index	**Target leadership excellence index percentages**			
Critical success factor and leadership excellence	**Unitary impact on LE**	**Upper limit**	**LEI= 61**	**70**	**75**	**80**	**85**
Organisational Values	0.30	85	59	59	69	85*	85*
Vision	0.17	85	64	64	64	64	64
Mission	0.25	85	64	64	64	64	84
Strategy	0.13	85	61	61	61	61	61
Key Issues	0.43	85	54	75	85*	85*	85*

Note: The structural model results obtained for this aggregated data set are presented in Appendix C (Tables 13, 14, and 15)

Table 7.18. Revised Indices of CSFs and Leadership Excellence

In this case we assumed a upper limit of 85% for all CSFs. As Table 7.18 illustrates, if leaders substantially improve their skills in managing key operational issues, the organisation can potentially achieve an overall LEI of 70 points. This indication is not surprising and is indeed in line with our previous recommendations. By being able to assume some risks, trusting staff and giving them authority to make decisions and take actions in their sphere of competencies, while working more in partnership with peers and subordinates, leaders can significantly improve their overall performance. A massive

improvement of 15 points can potentially be obtained if leaders also increase the Organisational Values score, developing shared values, effectively communicating them, and, in particular, *walking the talk.* Leadership excellence indexes above 75% imply changes in several CSFs and are difficult to anticipate at this moment.

As discussed in the previous chapter, it must be recognised that the Seeker's Approach uses structural coefficients that are valid for a particular moment, but the environment is so changeable and dynamic that is risky to assume that the path coefficients will be stable in the medium run. Moreover, since this is a structural equation model, there are simultaneous effects that are not easy to predict. In any case, the approach can contribute to make leaders aware of the need to change some behavioural aspects and improve their competencies on certain fields.

Some general conclusions can be drawn from the use of SEM in the measurement of Leadership Excellence in the Portuguese municipalities:

- Correlation analysis and Cronbach-alpha coefficients suggest that the scales have convergent validity and internal consistency;
- The structural coefficients are all positive and the large majority of them statistically significant, supporting the general pattern of relationships postulated in the literature and proposed in our model.
- The R^2-values obtained for each latent variable are high, giving evidence of the model good-fit;

Therefore, the structural model developed provides a good understanding of the relative influence of each CSF on Leadership Excellence. Furthermore, the results obtained point to the criticality of using a holistic approach to leadership, since failures in one of the model's dimensions can jeopardise the overall performance of leaders.

Overall, the methodology used is sound and robust. The structural coefficients and final latent variable scores were very stable during the process of refining the measurement model.

Results also indicate that the measures of reliability and validity will potentially improve with the use of larger data sets.

Since this is a new model, the scales used for each construct are also tentative and can be further refined in subsequent applications. Besides, future studies can investigate alternative hypotheses, by considering new paths linking the constructs proposed or, inclusively, by introducing new drivers of Leadership Excellence.

CHAPTER 8. BUSINESS SCORECARD FOR THE PORTUGUESE MUNICIPALITIES

The previous chapters were dedicated to the measurement of Organisational Excellence in the Portuguese Municipalities from an internal perspective. With this purpose in mind, a model was developed and tested. Data were collected from the municipalities' leaders and, as much as possible, from local government officers. We thus obtained a picture of OE from the internal stakeholders' angle (see Chapter 6). However, one can legitimately ask to what extent it reflects the views of the local communities on the matter.

It is impossible to evoke OE unless citizens – regarded as the final customers of Public Administration – are satisfied with the services the municipality provides, the way it interacts with them and its general role in improving the quality of life of the communities it serves.

Besides the need of getting citizens feedback to properly assess OE, citizens' participation in various aspects of governance has wider purposes, as discussed in Section 8.1. Generally, it is seen as essential to modernise public services and to enhance democracy.

Section 8.2 describes the model used to measure OE from the citizens' perspective. Essentially, such a model corresponds to a Scorecard covering the Critical Success Factors previously identified.

The proposed scorecard was applied to the Portuguese Local Government and validated using data collected from citizens of different municipalities, as explained in Section 8.3. The main results are reported in Section 8.4 and some recommendations made based on the research findings.

Finally, in Section 8.5, the Scorecard is critically reviewed. It is suggested that its implementation may help local government leaders to understand how they can provide better value for the citizens they serve and, thus, ultimately, contribute to improve the quality of local democracy.

8.1. PURPOSES AND MECHANISMS OF CITIZEN PARTICIPATION

Democratic countries repeatedly acknowledge the value of citizens' participation in governance. Both left-wing governments and right-wing governments promote citizens involvement, although with different arguments. For the Left, citizen participation contributes to strengthen social rights; for the Right, the emphasis is more on the individual capacity to make public services more responsive to the consumer needs (Docherty *et al.*, 2001). However, in any case, too often governments do not translate the discourse into innovative practices capable of fostering citizen engagement.

According to Lowndes *et al.*, (2001a), participation broadly refers to "public involvement in the processes of formulation, passage and implementation of public policies".

From a quality management point of view, citizens, as customers, are important sources of new ideas for service improvement. Their feedback can help public managers to better meet citizens' needs, while contributing to simplify processes, reduce bureaucracy and modernise Public Administration.

Initiatives such as the Best Value in the UK tend to see citizen consultation as the key for developing responsive and user-focused services. Local authorities are expected to involve users more actively in diagnosing the deficiencies of current services, setting targets for improvement and monitoring progress (Martin and Boaz, 2000).

As customers and taxpayers, citizens have also the right to be informed about the performance of Public Administration and to demand effectiveness, efficiency and equity in service delivery.

Moreover, citizen participation in local governance is increasingly seen as a way of building trust in government and enhancing democracy. It responds to calls for greater government transparency and accountability (OECD, 2001b) and, in Local Government, is regarded as a response to the discrediting of local electoral mandates and traditional practices (Docherty *et al.*, 2001).

Although, traditionally, in representative government, it is the responsibility of elected officials to "weigh the various demands on public resources and balance the relative merits of voters' arguments for regulating a particular activity or funding a given service" (Parr and Lampe, 1996), good local governance demands a continuos dialogue with local

government leaders (not only when elections are held). Public input is strategically very important and urgent (Corrigan and Joyce, 1997). As Corte-Real (2001) puts it, "the citizen's approach exposes political decision-makers and Public Administration itself to the Public".

Moreover, citizen participation creates a sense of ownership and promotes community identity (Parr and Lampe, 1996).

To accomplish these purposes, citizen participation has to be strategically analysed and the mechanisms for engagement carefully chosen. Without such concern, it will be ineffective and soon "consultation fatigue" (OECD, 2001b) will emerge. Furthermore, effective co-ordination is necessary to make the best use of the resources available (Martin and Boaz, 2000).

According to an OECD document (OECD, 2001b), the levels of interaction between citizens and government can range from information to active participation (see Figure 8.1).

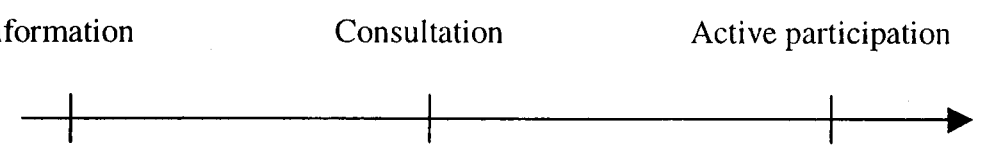


Figure 8.1. Spectrum of government-citizen interactions

The first level – information – is essentially a one-way relation and covers both 'passive' access to information upon citizens' demands and 'active' measures by governments to disseminate information to citizens. The second stage – consultation – requires a two-way relation in which citizens provide valuable feedback to government. Finally, at the end of the spectrum, active participation describes a relation based on partnership in which citizens actively take part in the policy-making process.

With reference to Local Government, Martin and Boaz (2000) argue that local authorities have been trying to improve communication with local people, by developing more sophisticated forms of participation, such as the dialogue between service providers and users about specific service issues and the active and direct involvement of individuals and communities in policy debates.

Different levels of interaction may be appropriated in different situations. Increasing levels of participation require superior levels of "maturity" from both governments and citizens. Even the lowest levels of interaction require citizens to understand their rights and obligations and be willing to act upon them. High levels of engagement assume citizens' capacity to discuss and generate policy opinions independently. Accordingly, Governments, in their turn, are expected to be increasingly open, disclosing information, sharing their agenda, negotiating the proposals and improving decision-making processes.

A recent study conducted in the UK (Lowndes *et al.*, 2001a), using a combination of a large-scale survey and some case-studies analysis, reports the use of different forms of participation in Local Government. Findings reveal that consumerist methods – complaints/suggestion schemes and service satisfaction surveys – dominate (more than 80% of the local authorities use them). Similarly, the large majority of the authorities report the use of public meetings and forums and the publication of consultation documents. Even more innovative practices – such as community planning, visioning techniques, citizens' panels, and interactive web sites – are being introduced on a significant scale. Generally, all modes of participation are on the increase. The rapid take-up of new forms of participation suggests a "latent disposition within local government for much greater public involvement and an enthusiasm for developing new opportunities" (Lowndes *et al.*, 2001a).

The same study also investigates the main factors stimulating participation initiatives and the benefits and problems encountered in practice. In this regard, many respondents stressed the importance of gaining citizens' views to improve decision-making processes and the services provided. On the other hand, the majority of the respondents pointed out the lack of time and resources followed by the 'lack of public interest' as the main factors preventing a more extensive use of citizen participation.

In a further investigation (Lowndes *et al.*, 2001b), the authors analysed some reasons why participation initiatives are not always supported by the public and often fail to influence decision-making. The research used focus group discussions carried out with citizens in eleven contrasting local authority areas. According to their findings, citizens participate on the "the issues that matter to them", and, obviously, these depend on people's own priorities and experiences. A major problem is the lack of awareness of the limitations of local authorities' responsibilities and competencies (also stressed by Martin and Boaz,

2000). At the same time, the study reveals that, in spite of the citizens' stated willingness to get involved on the "big issues", very few had actually done so. Involvement with the council is largely reactive and almost always confined to the protection of people's own or their community's immediate interests. In addition, there is a tendency to rely on a few committed individuals. Citizens also claim a more active role of elected members, who should be "out and about" more to look at the problems raised by the public. Concerning the forms of participation, citizens tend to prefer postal questionnaires, face-to-face interviews and public meetings. Overall, there is limited experience and knowledge of different forms of consultation. Some problems of accessibility were also reported (Lowndes *et al.*, 2001b).

The major obstacle for citizen participation, as pointed out by Lowndes *et al.*'s (2001b) research, is the perception that the local authorities are unresponsive to public concerns.

To overcome some of these problems, governments must invest time, resources and commitment in building frameworks and tools for citizen engagement, and evaluating their performance. Particular attention should be paid to develop ways of getting young persons, low income workers and minorities involved, since these are the groups where levels of social and political trust seem to be declining (Docherty *et al.*, 2001; Martin and Boaz, 2000).

As Docherty *et al.* (2001) highlight, "socio-economic characteristics such as education are likely to be reasonable predictors of participation behaviour, but such factors may be mitigated by others such as strong civil culture, political mobilisation and the approaches and techniques (...) adopted by political institutions". These hypotheses were tested in four distinct neighbourhoods in Scotland (Docherty *et al.*, 2001). The research used logistic regression techniques to explain differences between neighbourhoods. Higher civic culture indexes were associated with those individuals who rated their neighbourhood as a very good place to live, those who thought their neighbourhood had improved over recent years and people with a degree or academic qualifications. Counter-intuitively, social class and employment status were not found to be relevant.

Overall, people are willing to participate when they feel they are listened to and see tangible results of their participation.

Therefore, in strengthening the relations with citizens, governments must ensure that (Lowndes *et al.*, 2001a, 2001b; Martin and Boaz, 2000; OECD, 2001b):

- information is complete, objective, reliable, relevant, easy to find and to understand;
- participation has clear goals and rules, avoiding unrealistic expectations;
- citizens' input is encouraged and sufficient time is provided for new ideas to emerge;
- political leaders are actively involved in getting citizens' participation, inclusively personally inviting and recruiting key participants to make the consultation as inclusive as possible;
- a repertoire of methods are employed to reach different groups and address different issues;
- the results of consultation exercises are linked to decision-making processes and the public is informed of the outcomes and the reasons for the final decision so that confidence in the efficacy of participation rises;
- decision-making processes are sufficiently flexible to integrate citizens' views and proposals without an increase in bureaucracy;

Local authorities, in particular, face the huge challenge of "actively nurturing the capacity and political will to 'talk' and 'listen' to local people and realigning intra- and inter-organisational structures and processes in the light of what they hear" (Martin and Boaz, 2000). Citizens' empowerment requires local authorities to share power and that may not be always easy (Parr and Lampe, 1996).

In Portugal, some measures have been taken to increase citizen participation and overcome the idea, inherited from the decades of dictatorship, that Public Administration is distant and authoritarian (Araújo. 2002).

In the early 1990s, two commissions were created where citizens participated: the Enterprise-Administrative Commission and the Forum Citizen-Administrative Commission (Corte-Real, 2001).

In order to empower citizens, the Code of Administrative Procedure includes 188 articles focusing on citizens' rights during the administrative decision-making process. The Code aims to safeguard the transparency of administrative actions through ensuring access to information and facilitating participation in decision-making for those directly interested (Araújo, 2001). With this purpose, legislation was issued. Among the new pieces of

legislation, the Law-Decree 65/93 establishes citizens' right to consult administrative documents and to have copies of them if necessary. Other mechanisms, such as the "Yellow book" (Instruction 189/96), were set up to guarantee that public services answer citizens' complaints and suggestions.

Furthermore, as mentioned in Chapter 1, the Portuguese government has committed substantial resources to the introduction and development of new information and communication technologies in public agencies as a tool to bring Public Administration closer to citizens and to improve its responsiveness. As an example, a relatively sophisticated system of information to citizens was created – the INFOCID –, which also provides certain services on-line, using a database accessible all over the country, in multimedia kiosks and on the Internet.

8.2. A MODEL FOR MEASURING ORGANISATIONAL EXCELLENCE FROM THE CITIZENS' PERSPECTIVE

There is little research on citizens' assessment of Organisational Excellence, apart from the measurement of customer satisfaction with particular public services, sometimes using the SERVQUAL model (see section 3.8). At the macro-level, a more extensive literature exists on measuring the Quality of Life (Sirgy *et al.,* 2000). None of these approaches, however, would fit our research purpose of measuring, according to citizens' views, the degree to which a municipality is implementing a set of quality concepts and practices and testing the extent to which they are leading to superior performance (in terms of overall image, financial situation, quality reputation and mission accomplishment).

Section 8.2.1 describes the development of a scorecard, which, in our perspective, can achieve such purposes. Next, in Section 8.2.2 the model constructs are discussed in the Local Government context.

8.2.1. Kanji's Business Scorecard (KBS)

In order to measure OE from the external stakeholders' perspective, a framework had to be developed incorporating the CSFs previously identified and embedded in KBEM (see Chapter 2).

It was recognised, however, that external stakeholders might lack knowledge or expertise to individually access each and every element of KBEM. In fact, citizens, for instance, will certainly perceive the impact of poor performance from front-line local government officers but may well have no idea about the amount of training provided.

Therefore, the model to be developed should concentrate on those dimensions that are the most relevant to the external stakeholders and on which their feedback is crucial. In short, it had to be simple, flexible, and compatible with KBEM.

In the process of designing such framework, the Balanced Scorecard (BSC) devised by Kaplan and Norton in 1992 (see Figure 8.2) was carefully reviewed.

Figure 8. 2. Kaplan' and Norton's Balanced Scorecard

(Kaplan and Norton, 1992)

The BSC is a very well-known model which many organisations – inclusively in the Public Sector (Kaplan and Norton, 1996) – are already adopting in some form. Its structure is therefore appealing. Moreover, the four perspectives proposed by the authors are consistent with most TQM principles and core concepts used in KBEM:

- It explicitly considers the customer perspective and acknowledges the need to measure customer satisfaction;

- The learning and growth perspective encourages the development of a culture of continuous improvement;
- Because it incorporates process-based metrics, it is consistent with process management, teamwork and cross-functional integration; and
- The holistic view promotes cross-functional reasoning, as advocated by TQM.

By expanding the meaning of the BSC categories and integrating in it the principles and critical success factors that constitute KBEM, the similarities between the two frameworks become apparent (see Figure 8.3).

Figure 8.3. Comparative Business Scorecard

(Kanji, 2000b)

The conceptual model shown in Figure 8.3 has several advantages over Kaplan and Norton's Balanced Scorecard (Kanji and Sá, 2002):

- It calls attention to the necessity of taking into account the needs and expectations of all organisational stakeholders (employees, suppliers, investors, community); there is an attempt to *delight all the stakeholders*, not only the customers;
- The *process excellence* dimension, which replaces the internal business perspective, emphasises the importance of thinking of an organisation as an interrelated network of processes and developing measures to manage them;

- The *organisational learning* concept essentially captures the same idea as the innovation and learning perspective of Kaplan and Norton's BSC; however, by explicitly integrating principles such as teamwork, prevention and continuous improvement the model becomes more dynamic;
- The results perspective of the BSC is somehow restricted by focusing exclusively on the shareholders; in contrast, the model proposed makes clearer that OE implies providing value for all stakeholders.

Based on these scorecard dimensions and making use of the sound methodology associated with KBEM, a structural model was developed (see Figure 8.4).

Figure 8.4. Kanji's Business Scorecard (KBS)

(Kanji and Sá, 2002)

As depicted, in order to achieve OE it is necessary to give simultaneous attention to the areas that comprise the Scorecard. Effective management of these CSFs will lead to a high Kanji's Business Scorecard Index, meaning that the organisation is providing good value for all stakeholders and has a strong quality reputation.

In contrast to the BSC, the structural model shown in Figure 8.4 clarifies the relationships among the various scorecard perspectives. Furthermore, its mathematical formulation allows the model to be empirically tested and validated.

8.2.2. Interpretation of the KBS Constructs in the Local Government

Organisational Values

Organisational values are the main driver in KBS. Similarly to Kaplan and Norton's (1992) strategic foundation of the BSC, we also believe that KBS should be based upon the organisational values, which in turn are translated into the organisation's vision, mission and strategy (see section 7.3).

Support for the prime role of organisational values as a main driver for quality in the Public Sector can be found in Gaster's (1995, 1996) model for public service quality (see Section 3.7).

Public service values provide the foundation for quality in public services. In fact, the driving aim of public service organisations (including Local Government institutions) is to meet public purposes, efficiently, fairly, with constrained resources and in accordance with public service values (Gaster, 1996).

As a OECD document emphasises (OECD, 2001a), "(a) compelling statement of values creates an emotional connection with the public", thus contributing to a Public Administration closer to its citizens and willing to fight old bureaucratic practices.

In this dimension we will measure the extent to which:

- citizens know what the organisation stands for;
- citizens feel organisational values reflect concerns with their needs and expectations;
- the municipality is translating the values into consistent strategies and policies and using them to build a sense of community.

Process Excellence

Managers need to focus on those critical internal operations that enable them to satisfy customer needs. Process excellence requires a good information system that allows the identification of the root causes of problems when they arise. For that reason, measurement is essential.

In KBS, *processes excellence* measures the extent to which citizens think the municipality:

- delivers its promises and services run smoothly and as planned;
- measures processes and disseminates reliable performance indicators;
- uses benchmarking to constantly improve its processes.

Organisational Learning

Organisational learning occurs from innovation and experimentation, risk-taking, and customer responsiveness (Harrow and Willcocks, 1992).

Given the rapid changes in society, Local Government needs to deal with increasing uncertainty, which demands a high capacity for learning, changing and involving the stakeholders in the process (Stewart, 1995).

Organisational learning measures the extent to which the municipality:

- introduces new services and/or improves the ones it currently provides;
- works in partnership with its stakeholders, listening to other people's ideas;
- has a culture of continuous improvement and a learning attitude.

Delight the Stakeholders

Stakeholders' support for TQM implementation is critical (Durant and Wilson, 1993). Unless key local government actors are committed to Quality, initiatives are likely to fail.

Municipalities need to understand stakeholders' needs and how the quality of the services provided is perceived. Different stakeholders are expected to have different (and sometimes even conflicting) views on these matters.

Delighting the stakeholders implies not only using customer satisfaction surveys (Younis *et al.*, 1996), but also engaging citizens in consultation initiatives. As Younis *et al.* (1996) stress, all stakeholders should participate in the planning, monitoring and evaluation stages, being able to influence what services are provided and suggesting ways to improve service delivery.

Delight the stakeholders measures the extent to which citizens feel the municipality:

- responds to their needs and requirements in an active and proactive way;
- effectively deals with complaints when something goes wrong;

- provides them with relevant and reliable information.

Business Scorecard Index

As mentioned before, if all these scorecard dimensions (or CSFs) are properly managed, the Business Scorecard Index will be high and citizens will think that they receive good value for money and positively evaluate the financial situation of the municipality, its overall image, quality reputation and mission accomplishment.

8.3. MODEL VALIDATION AND TESTING

A number of testable propositions are embedded in the structural model presented in Figure 8.4 (see page 256):

- H1: The degree to which the municipality defines and shares its values with the citizens and uses them to guide its actions and to create a sense of community has a positive impact on process excellence (H1-A), organisational learning (H1-B) and stakeholders' delight (H1-C), thus contributing to Scorecard Excellence;

- H2: The extent to which the municipality manages its core processes, working in teams and practising benchmarking has a positive impact on Scorecard Excellence;

- H3: The extent to which the municipality has a learning attitude and develops a continuous improvement culture has a positive impact on Scorecard Excellence;

- H4: The extent to which the municipality delights its stakeholders (in this case the citizens), meeting their needs, actively listening to their suggestions and complaints and disclosing relevant information, has a positive impact on Scorecard Excellence.

The interdependence among these constructs and the holistic nature of the scorecard mean that all these elements must be implemented simultaneously if OE is to be achieved. Globally, their alignment and consistency will contribute to Scorecard Excellence.

Since the components of KBS cannot be directly observed, appropriate scales were developed to measure each scorecard dimension and thus test the hypotheses above.

8.3.1 KBS Citizens' Questionnaire

In the development of the citizens' questionnaire, their different roles were taken into consideration. As argued in Chapter 3, various performance dimensions (such as responsiveness, efficiency, effectiveness) will be valued differently according to the position citizens assume at any particular moment (for instance, service recipients, electors, taxpayers). Therefore, questions were included to cover, as much as possible, all these issues.

In some instances, measures traditionally used in balanced and business scorecards were integrated. However, the very limited use of these approaches in the Local Government context meant that almost completely new scales had to be developed to measure each of the KBS constructs. There was also a concern to include measures identical to those embedded in KBEM to facilitate comparisons between internal and external assessments (see Chapter 9).

Table 8.1 provides a summary of the questionnaire items.

Construct	Measurement items
Organisational Values (OVALUES)	• Communication of values, principles and main projects (VALCOM) • Strategy and policy alignment (ALIGN) • Development of a sense of community and identity (COMMUNITY)
Process Excellence (PROCESS)	• Processes and services conformity (CONFORMITY) • Co-ordination and teamwork (TEAMS) • Communication of performance (PERFCOM) • Benchmarking (BENCHMARK)
Organisational Learning (LEARNING)	• Continuous improvement culture (CICULTURE) • Leadership accessibility and approachability (LEADACCESS) • Responsiveness to changes in citizens' needs and demands (RESPONSIVE) • Services and processes innovation (INNOVATION) • Partnership building (PARTNER)
Delight the Stakeholders (STAKEDEL)	• Awareness of citizens' needs and preferences (NEEDSAWARE) • Quality of information disclosure and communication (INFORM) • Suggestions and complaints management (SUGCOMPLAINT)
Scorecard Excellence (SCOREX)	• Stakeholders' care (CARE) • Value-for-money (VFM) • Financial situation (FINANCE) • Overall image (IMAGE) • Contribution to the development of the local community and quality-of-life improvement (DEVELOPMENT)

Table 8.1. KBS constructs and associated measurement items

The citizens' questionnaire (see Appendix D) includes therefore 20 questions/statements. Respondents were asked to which degree (from 1 to 10) they agreed with each statement.

8.3.2. The Sample

Citizens were randomly selected in three municipalities and formed small samples ranging from 33 to 87 observations. The questionnaires were completed in the presence of the researcher in public places, such as, public libraries, bus stops and the periphery of the city council. To complement the analysis, questionnaires were distributed to an extra set of 130 citizens representing 56 different municipalities.

There was a concern to include citizens from different genders, ages, and socio-economic levels, although this information was not recorded.

In this study, data were gathered from different municipalities not necessarily with the main aim of generalising the findings, but instead of generating enough variability to allow the hypothesised relationships to be tested. Yet, the sample of municipalities included in this survey is representative in terms of size and geographic location within mainland Portugal.

Although larger sample sizes would improve the quality of the estimations, time and cost restrictions prevented a more comprehensive and rigorous study to be conducted.

8.3.3. Process of Validation, Testing and Estimation

For the reasons discussed in Chapter 5, structural equation modelling was chosen to analyse the data and test the model depicted in Figure 8.5. For an interpretation of the various symbols refer to section 6.2.3 (see pages 175-176).

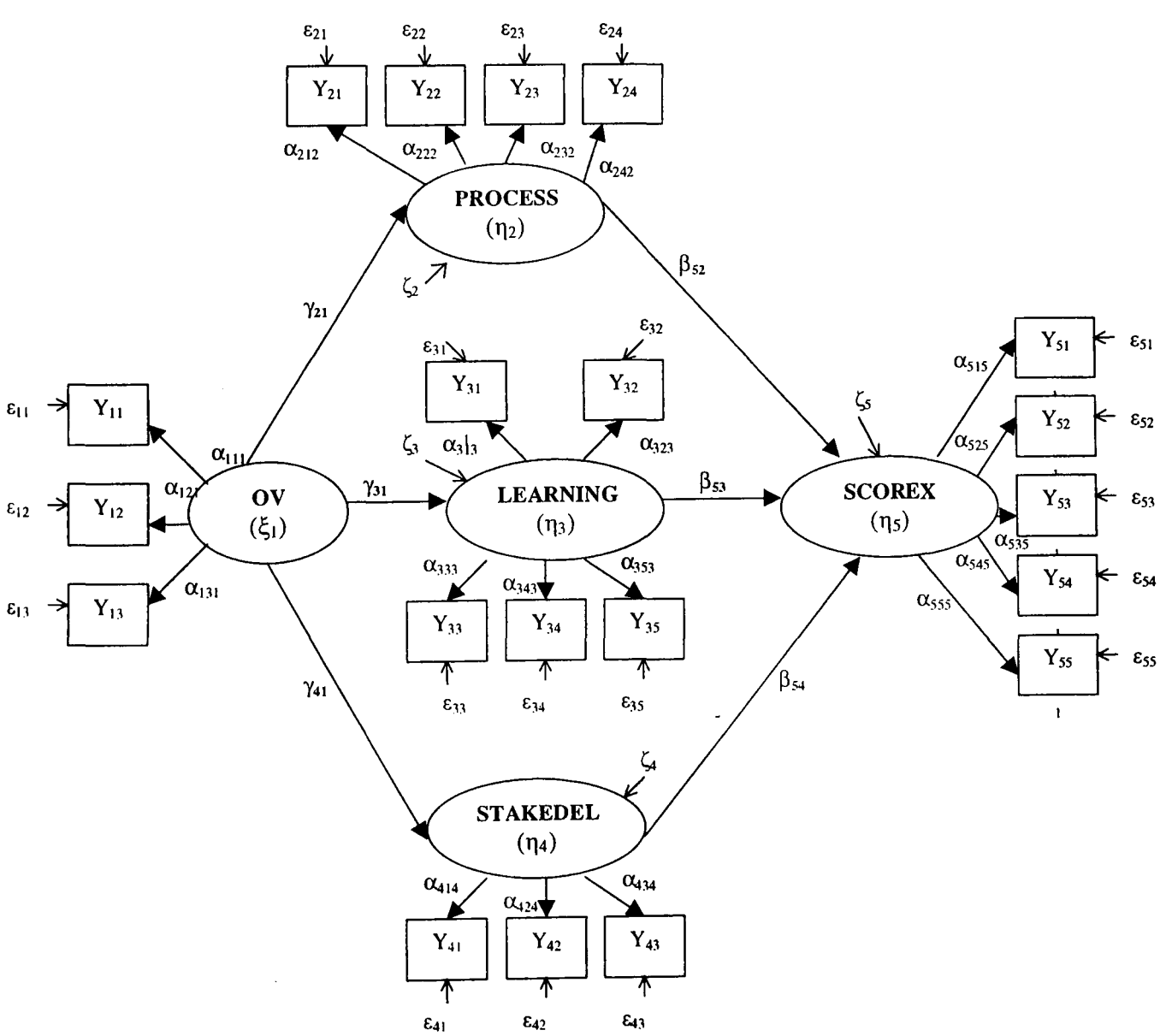


Figure 8.5. Latent variables structural model for KBS

The model was estimated using the Partial Least Squares (PLS) method.

To ensure that legitimate conclusions are drawn about the nature of construct relationships, the reliability and validity of measures was assessed first. As recommended by Hulland (1999), the quality of the measurement model was examined looking essentially at (1) individual item reliabilities, (2) convergent validity of the measures associated with individual constructs, and (3) discriminant validity.

The path model was then analysed, the proposed hypotheses tested, and the adequacy of the model investigated.

The scores for each latent variable (model construct) were computed according to the following formula (Kanji, 1998):

$$Index = \frac{\sum w_i \bar{x}_i - \sum w_i}{(n-1)\sum w_i} \times 100$$

where

n = number of points on the scale

w_i s = weights of individual manifest variables for all latent variables

$\bar{x}_i$ s = means of individual manifest variables for all latent variables.

8.4. RESULTS AND FINDINGS

The stages for model validation and testing were explained with some detail in the previous chapters (see sections 6.3 and 7.5). Therefore, here, we will try to avoid unnecessary repetitions by keeping these explanations to a minimum and by concentrating on the interpretation of the results.

As mentioned before, data were collected from citizens in different municipalities. In this section, we will present first the results from a general sample (130 questionnaires corresponding to 56 municipalities) and then from individual samples for three municipalities. The focus on three municipalities allows the identification of some patterns in citizens' evaluations and a more meticulous detection of areas of strength and weakness. Additionally, it further contributes to validate the proposed model.

8.4.1. Data Analysis for the General Sample

- Mean, Standard Deviation and Normality Analysis

For the general sample, basic statistics are presented in Table 8.2, along with the results of the normality tests, which show that the variables are not normally distributed. Therefore, using PLS is highly recommendable.

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test	
				Statistic	Sig.
OVALUES	VALCOM	5.14	2.127	.971	.007
	ALIGN	4.60	1.919	.963	.001
	COMMUNITY	4.31	2.227	.945	.000
PROCESS	CONFORMITY	4.86	1.742	.955	.000
	TEAMS	4.48	1.981	.956	.000
	PERFCOM	4.78	2.465	.954	.000
	BENCHMARK	4.85	2.095	.964	.002
LEARNING	CICULTURE	4.54	2.084	.958	.000
	LEADACCESS	4.76	2.490	.952	.000
	RESPONSIVE	4.68	2.050	.959	.001
	INNOVATION	4.45	2.004	.962	.001
	PARTNER	5.32	1.981	.955	.000
STAKEDEL	NEEDSAWARE	4.50	2.143	.950	.000
	INFORM	4.59	2.130	.963	.001
	SUGCOMPLAINT	4.10	2.042	.947	.000
SCOREX	CARE	4.65	2.145	.959	.001
	VFM	4.38	2.150	.960	.001
	FINANCE	5.08	2.012	.960	.001
	IMAGE	5.17	2.249	.968	.003
	DEVELOPMENT	5.42	2.237	.957	.000

Table 8.2. Item statistics (General Sample)

One can observe that overall the mean values are relatively low. Fifteen out of twenty items have a negative average (bellow 5 in a 10-point scale).

The highest value (μ=5.42) is given to the DEVELOPMENT item. It shows that citizens generally acknowledge the importance of Local Government's role and regard as positive the contribution given by the Portuguese municipalities for the economic, social and cultural development of local communities. Positive means are also obtained for the municipalities' ability to communicate what they stand for (μ=5.14), their capacity to work in partnership with different entities (μ=5.32), their financial situation (μ=5.08) and overall image (μ=5.17).

On the other hand, citizens assess as particularly poor the municipalities' ability to build a sense of community (μ=4.31), the way they deal with suggestions and complaints (μ=4.10), and their capability of providing good value for money (μ=4.38). This last aspect is in line with the general conviction that Local Government could do better with the resources available ("there is waste and inefficiency") and is somehow detached from the citizens' real needs. As mentioned in Section 8.1, some measures were introduced to make complaining easier for citizens. However results suggest that the legislative measures are not having the expected impact. Books of complaints and suggestion schemes may be in place, but citizens still do not believe in their effectiveness.

- Item Correlation Analysis

To determine how the manifest variables relate to each other the Pearson correlation analysis was performed (see Table 1 in Appendix D).

All observed correlations (with the exception of a few relationships involving the FINANCE item) are statistically significant.

The weak correlation between the financial situation and the vast majority of the remaining questions could at first look surprising. However, it reflects the mechanisms of resource allocation traditionally used in the Public Sector, which are seldom integrated with performance indicators. In fact, according to the Portuguese law, described in section 1.2.1, most financial resources of the municipalities come from transferences from the Central Government allocated based on criteria that do not take performance considerations into account. Citizens, thus, perceive that the financial situation of the municipality does not depend much on the way it addresses other issues such as process excellence and stakeholder focus.

- Reliability and Validity Analysis

The main results of the reliability and validity analysis are shown in Table 8.3.

Constructs	No. items	Mean	S. D.	Cronbach alpha	Average inter-scale correlation*	Average item-to-total correlations	
						Scale items	Non-scale items
OVALUES	3	4.68	2.095	0.8563	0.8006	0.6731	0.5922
PROCESS	4	4.75	2.087	0.8660	0.8194	0.6320	0.5983
LEARNING	4	4.75	2.030	0.9121	0.8424	0.7217	0.6371
STAKEDEL	2	4.55	2.137	0.8892	0.8163	0.8006	0.6613
SCOREX	5	4.94	2.160	0.8951	0.8192	0.6239	0.5944

* See also Table 8.6.

Table 8.3. Measure characteristics (General Sample)

In the process of model refinement, two items were removed from the initial scales – LEADACCESS and SUGCOMPLAINT – since they did not contribute significantly to explain the associated construct, as indicated in the outer coefficient matrix (see justification in page 180). Clearly, both leadership approachability and the municipality's ability to deal with suggestions and complaints are important to achieve OE. As explained in other cases (see page 181), their removal from the measurement model only means that they were jeopardising the scales internal consistency, not that they are irrelevant.

After this procedure, the Cronbach alpha coefficients are high (see Table 8.3) and the outer coefficients are also acceptable (see Table 8.4), indicating that the scales are in fact reliable.

Correlation analysis provides evidence of convergent and divergent validity. Cronbach-alpha values are well above the minimum of 0.7 recommended by Nunnaly (1967) and exceed average inter-scale correlations, suggesting both scale homogeneity and convergent validity. Moreover, average correlation between items that belong to the same scale is higher than between scale and non-scale items, thus supporting divergent validity and corroborating that the measurement items do in fact load on the appropriate constructs.

On the whole, we can conclude that the measurement model proposed is both valid and reliable.

Item	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
VALCOM	0.133725				
ALIGN	0.474944				
COMMUNITY	0.501068				
CONFORMITY		0.101236			
TEAMS		0.336443			
PERFCOM		0.143844			
BENCHMARK		0.567704			
CICULTURE			0.595563		
RESPONSIVE			0.281916		
INNOVATION			0.093129		
PARTNER			0.120870		
NEEDSAWARE				0.374176	
INFORM				0.674977	
CARE					0.274441
VFM					0.257197
FINANCE					0.122405
IMAGE					0.238056
DEVELOPMENT					0.264171

Table 8.4. Outer coefficients (General Sample)

- Path Analysis

Figure 8.6 shows the scorecard path diagram with the inner coefficient estimates, which are all positive and in the predicted direction.

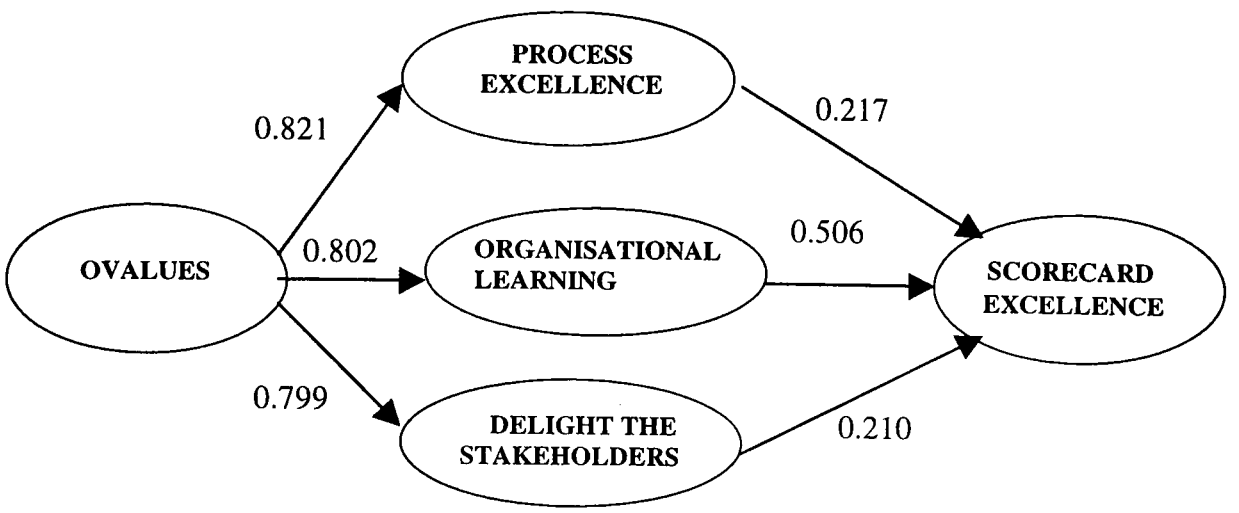


Figure 8.6. Citizens' scorecard path diagram (General Sample)

It can be seen that *Organisational Values* strongly influence *Process Excellence*, *Organisational Learning* and *Stakeholders' Delight*, thus confirming the critical role *Organisational Values* play in bringing the municipality and its citizens together. Furthermore, any change in *Organisational Learning* is likely to have a major impact on *Scorecard Excellence*, thus showing the importance of developing a continuous improvement culture. The high value of the corresponding structural coefficient (β=0.506) calls attention to the need of assuming risks and making innovations, what represents a considerable move away from the bureaucratic traditions of the Local Government.

To determine the significance of the parameter estimates, the t-statistics can be examined (see Table 8.5), although, as mentioned earlier, results of individually testing each hypothesis have to be interpreted with caution.

	Path	β	SD	t-statistic	Valid*
H1-A	OVALUES ➜ PROCESS	0.8210	0.0505	16.2688	✓✓✓
H1-B	OVALUES ➜ LEARNING	0.8018	0.0528	15.1798	✓✓✓
H1-C	OVALUES ➜ STAKEDEL	0.7994	0.0531	15.0548	✓✓✓
H2	PROCESS ➜ SCOREX	0.2170	0.0801	2.7089	✓✓✓
H3	LEARNING ➜ SCOREX	0.5063	0.0926	5.4684	✓✓✓
H4	STAKEDEL ➜ SCOREX	0.2098	0.0819	2.5625	✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 8.5. Validation of hypothesis testing (General Sample)

The results listed in Table 8.5 show that all path coefficients are significant at $p < 0.05$, giving support to the linkages embedded in KBS.

The latent variables correlation matrix, shown in Table 8.6, clearly indicates that the model is holistic, meaning that its components are strongly integrated. Accordingly, if a municipality is to achieve Excellence all the four perspectives – Organisational Values, Process Excellence, Organisational Learning and Delight the Stakeholders – must be considered simultaneously.

	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
OVALUES	1	0.8210	0.8018	0.7994	0.7804
PROCESS		1	0.8460	0.7978	0.8127
LEARNING			1	0.8531	0.8689
STAKEDEL				1	0.8149
SCOREX					1

Table 8.6. Correlation matrix among latent variables (General Sample)

The R^2 values (see Table 8.7), together with other results of the structural equation analysis, firmly suggest that the Scorecard provides a good fit for the data.

Endogenous construct	**Number of items**	**R^2 %**
Process Excellence	4	67.40
Organisational Learning	4	64.29
Delight the Stakeholders	2	63.91
Scorecard Excellence	5	78.73

Table 8.7. R^2 statistic for each endogenous construct (General Sample)

Figure 8.7 shows the indices calculated for each construct (CSF) according to the PLS estimation (details of these calculations can be seen in Appendix D – Table 4).

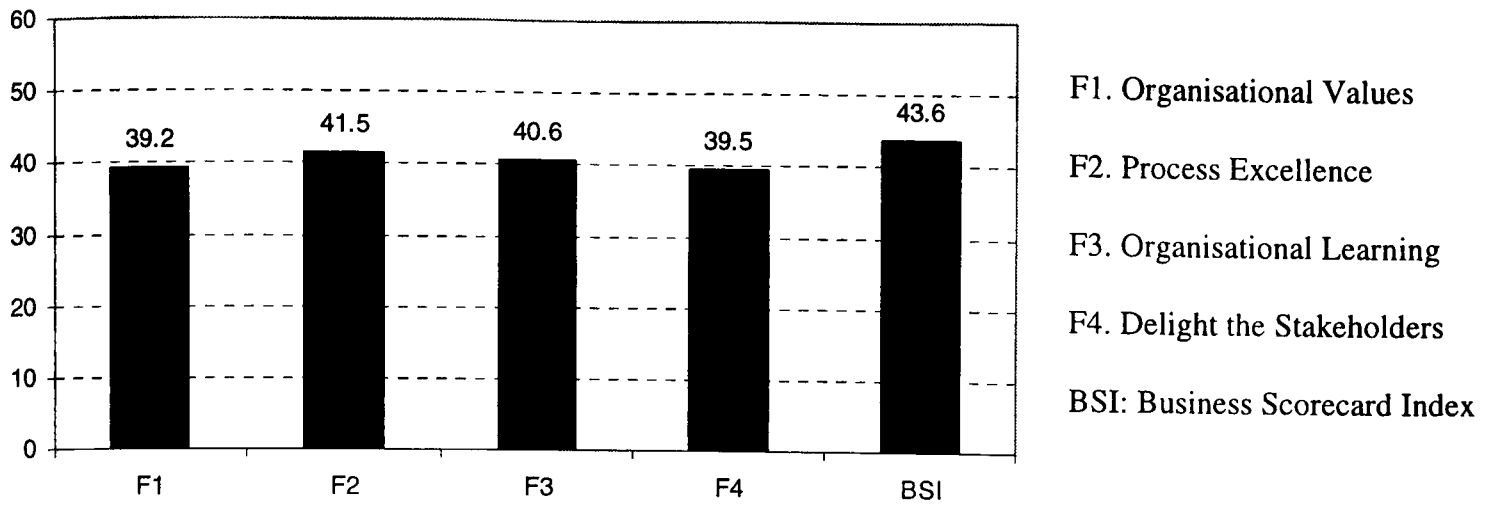


Figure 8.7. Indices of CSFs and Scorecard Excellence (General Sample)

As observed in Figure 8.7, the municipalities' performance across the various scorecard dimensions is relatively similar – ranging from 39.2 in *Organisational Values* to 41.5 in *Process Excellence*. This results in a Scorecard Index of 43.5 points, revealing that citizens' assessment of the Portuguese municipalities' performance is not satisfactory and there is plenty of room to improve.

It is interesting to notice that the final latent variable scores are below the mean values for the respective constructs (see Table 8.3). Due to the interdependent nature of the model, all dimensions of the scorecard suffer from the relatively poor performance in every construct.

Since, from Figure 8.5, no clear areas of strength emerge, one can say that, at a first glance, there are no natural candidates for improvement.

A useful starting point is to look at the inner coefficients. They clearly indicate the great immediate effect that improving *Organisational Learning* has on *Scorecard Excellenc*e, as well as the critical importance of *Organisational Values*.

The Excellence Seekers' approach, as discussed in previous chapters (see in particular page 198), helps to prioritise efforts and delineate improvement strategies. Table 8.8 illustrates its application to the case under consideration.

			Original index	Target business scorecard index			
Critical success factor and scorecard excellence	**Unitary impact**	**Upper limit**	**BSI= 43**	**50**	**60**	**70**	**80**
Organisational Values	0.406	80	39	39	39	57	80*
Process Excellence	0.217	80	42	42	42	42	46
Org. Learning	0.506	80	41	55	75	80*	80*
Stakeholders Delight	0.210	80	40	40	40	40	40

Table 8.8. Revised Indices of CSFs and Scorecard Excellence (General Sample)

Table 8.8 suggests that a significant increase in *Scorecard Excellence* can be achieved by focusing on *Organisational Learning*. The outer coefficient matrix (see Table 8.4) – which gives the relative contribution of each manifest variable to the correspondent construct – shows the crucial impact of developing a continuous improvement culture (0.595) and becoming more responsive to the citizens' needs and demands (0.282). In order to improve the *Organisational Values* score, which is the next priority, Portuguese municipalities need to make an effort to build a sense of community (0.501) and align the strategies and policies with the discourse (0.474).

In any case, it is important to keep in mind that the Seeker's approach is essentially a mathematical exercise, based on a maximisation algorithm, and, given the holistic nature of the Scorecard and the volatility of citizens' perceptions, the consequences of changes in any model dimension are difficult to predict.

8.4.2. Data Analysis for Three Additional Municipalities

The three municipalities selected have some similarities. They are all relatively large – with more than 50,000 inhabitants – and located in areas where the GNP per capita is reasonably high, even if Municipality Y benefited from the Cohesion Fund in 1999 (the latest statistics available). Moreover, at the moment the survey was conducted they were all under the same political party leadership.

Construct	Item	Municipality B	Municipality X	Municipality Y	General Sample
OVALUES	VALCOM	5.94	3.79	3.68	5.14
	ALIGN	5.73	3.32	4.22	4.60
	COMMUNITY	5.52	3.34	4.44	4.31
PROCESS	CONFORMITY	5.09	4.17	4.64	4.86
	TEAMS	4.36	3.77	4.48	4.48
	PERFCOM	5.36	3.94	4.14	4.78
	BENCHMARK	5.58	3.72	5.04	4.85
LEARNING	CICULTURE	5.18	3.49	4.30	4.54
	LEADACCESS	5.64	3.40	4.56	4.76
	RESPONSIVE	6.15	3.51	4.50	4.68
	INNOVATION	5.97	3.56	4.84	4.45
	PARTNER	6.42	4.26	5.32	5.32
STAKEDEL	NEEDSAWARE	5.67	3.63	4.48	4.50
	INFORM	5.30	3.87	4.60	4.59
	SUGCOMPLAINT	5.42	3.38	4.40	4.10
SCOREX	CARE	5.54	3.61	4.98	4.65
	VFM	4.88	3.40	4.76	4.38
	FINANCE	4.67	4.41	6.26	5.08
	IMAGE	6.73	3.24	5.82	5.17
	DEVELOPMENT	6.85	3.91	5.84	5.42
	SAMPLE SIZE	33	87	50	130

Table 8.9 Mean values by Municipality

Table 8.9 shows the mean values for each question obtained in each municipality, along with the averages calculated for the general sample. It can be seen that there are considerable differences in citizens' perceptions between the three samples.

For Municipality B, mean scores vary significantly, ranging from 4.36 (TEAMS) to 6.85 (DEVELOPMENT). Seventeen out of twenty indicators are positive. High scores are given to the municipality's image (μ=6.73), its ability to develop partnerships with stakeholders (μ=6.42) and, notably, its responsiveness (μ=6.15). In contrast, citizens think that internally there is not enough co-operation between departments (μ=4.36), the financial situation of the municipality is not very healthy (μ=4.67), and also believe they are not being provided with a particularly good value for money (μ=4.88).

The scenario for Municipality X is rather poor. The mean values are systematically bellow 5 points. Even less negative areas – such as financial situation (μ=4.41), establishment of partnerships (μ=4.26) and services conformity (μ=4.17) – struggle to be above 40%. The situation is especially worrying in the *Organisational Values* construct, with the municipality's ability to build a sense of community (μ=3.34) and the alignment of policies and strategies with the stated values (μ=3.32) receiving very low marks. This is obviously reflected in the municipality's overall image (μ=3.24).

Finally, according to its citizens' views, Municipality Y has a healthy financial situation (μ=6.26), an important role in improving the quality-of-life of the local community (μ=5.84), and a good overall image (μ=5.82). However, it seems to be experiencing some communication problems with its citizens, who do not know which the main values, proposes and projects of the municipality are (μ=3.68) and do not feel they are being properly informed about the organisation's performance (μ=4.14). Policy and strategy alignment is also fairly weak (μ=4.22).

Path analysis (see results in Appendix D) was performed using the measurement model tested and validated in the previous section, which proved to be robust[11]. Only for municipality B, it was necessary to make minor adjustments in the variables removed, so that the measures could fulfil the minimum requirements (i.e. outer coefficients above 0.1 and Cronbach-alphas higher than 0.6). In this particular case, however, results have to be interpreted with extra care, given the reduced size of the sample (n = 33).

The final path diagrams are shown in Figures 8.8, 8.9, and 8.10. The R^2 are also included to provide evidence of the adequacy of the model.

[11] See additional structural equation analysis results for each municipality in Appendix D.

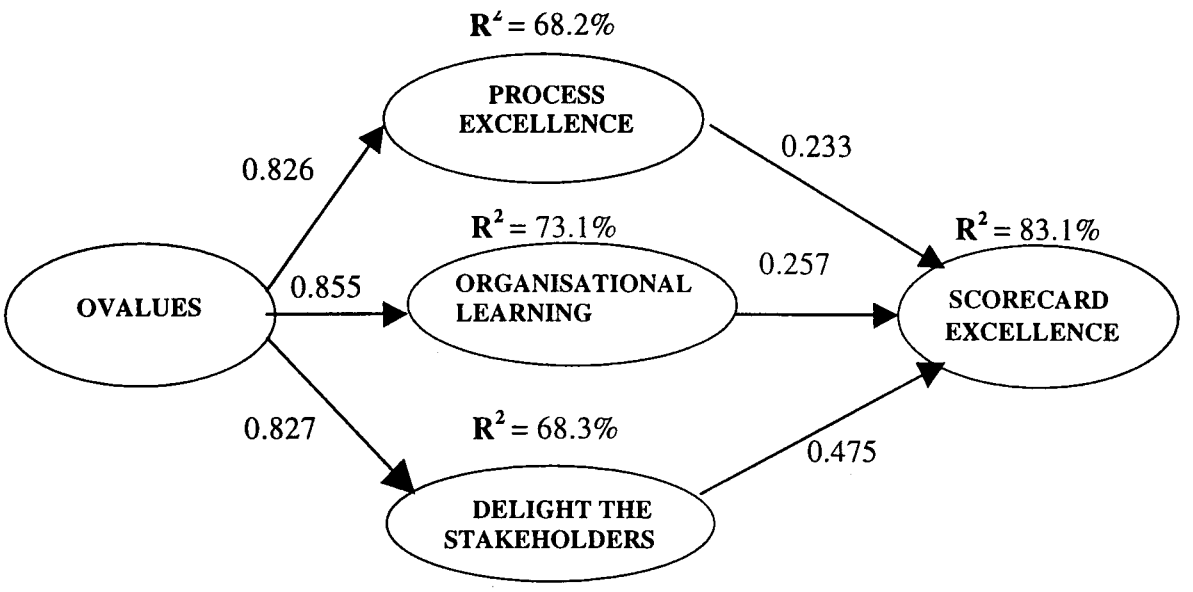


Figure 8.8. Citizens' scorecard diagram for Municipality B

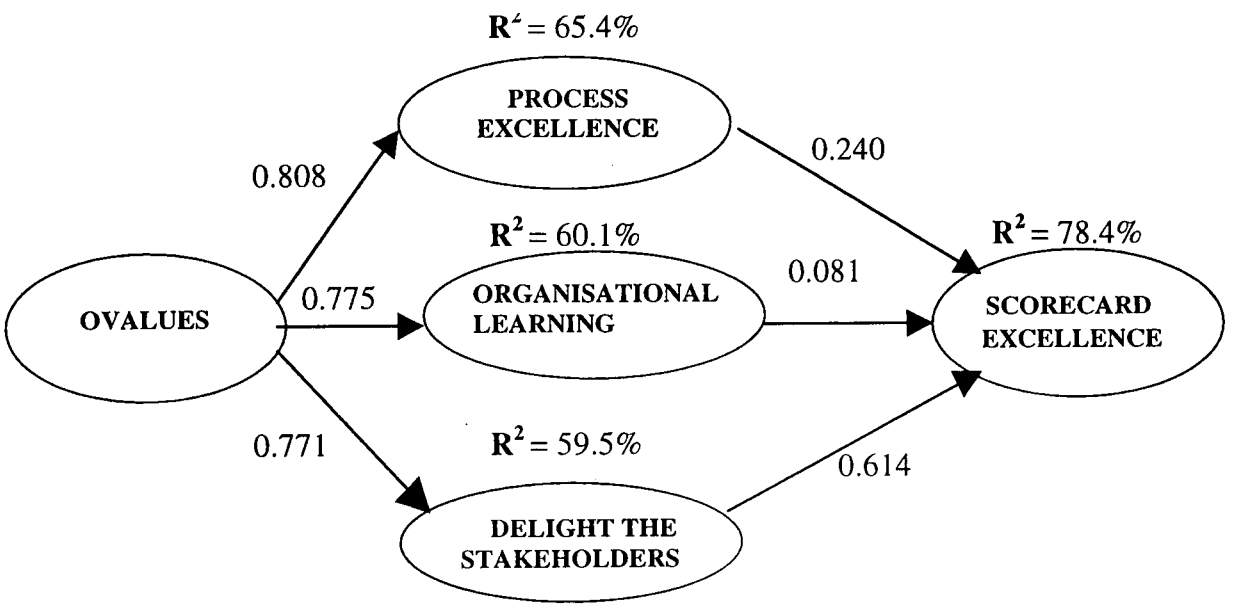


Figure 8.9. Citizens' scorecard diagram for Municipality X

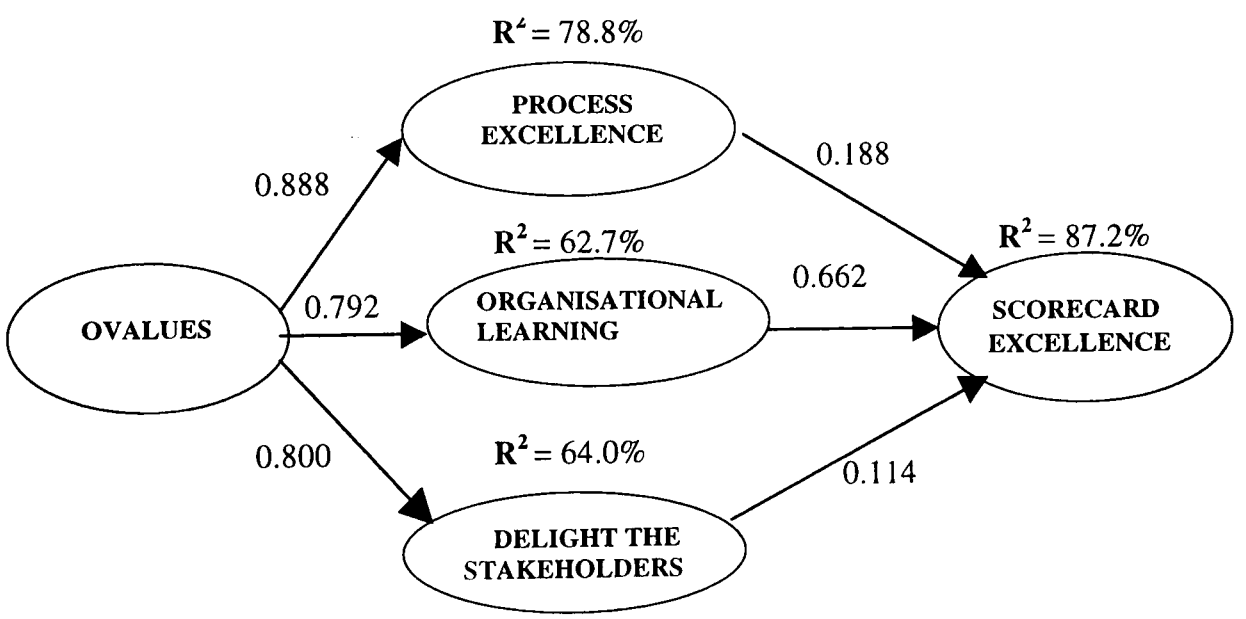


Figure 8.10. Citizens' scorecard diagram for Municipality Y

In the above diagrams, all paths are positive. The structural coefficients linking *Organisational Values* to the other Scorecard dimensions are especially high, supporting their role as the driver of the whole system. Moreover, the large majority of the hypotheses are validated for the various samples (see Table 8.10, 8.11, and 8.12).

	Path	β	SD	t-statistic	Valid*
H1-A	OVALUES ➜ PROCESS	0.8259	0.1013	8.1570	✓✓✓
H1-B	OVALUES ➜ LEARNING	0.8548	0.0932	9.1707	✓✓✓
H1-C	OVALUES ➜ STAKEDEL	0.7994	0.0531	15.0548	✓✓✓
H2	PROCESS ➜ SCOREX	0.2329	0.1475	1.5789	-
H3	LEARNING ➜ SCOREX	0.2575	0.1897	1.3576	-
H4	STAKEDEL ➜ SCOREX	0.4751	0.1543	3.0795	✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 8.10. Validation of hypothesis testing – Municipality B

	Path	β	SD	t-statistic	Valid*
H1-A	OVALUES ➜ PROCESS	0.8084	0.0638	12.6625	✓✓✓
H1-B	OVALUES ➜ LEARNING	0.7750	0.0686	11.3049	✓✓✓
H1-C	OVALUES ➜ STAKEDEL	0.7712	0.0690	11.1690	✓✓✓
H2	PROCESS ➜ SCOREX	0.2402	0.0969	2.4784	✓
H3	LEARNING ➜ SCOREX	0.0807	0.1107	0.7290	-
H4	STAKEDEL ➜ SCOREX	0.6136	0.0950	6.4582	✓✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 8.11. Validation of hypothesis testing – Municipality X

	Path	β	SD	t-statistic	Valid*
H1-A	OVALUES ➜ PROCESS	0.8875	0.0665	13.3423	✓✓✓
H1-B	OVALUES ➜ LEARNING	0.7915	0.0881	8.9857	✓✓✓
H1-C	OVALUES ➜ STAKEDEL	0.7999	0.0866	9.2359	✓✓✓
H2	PROCESS ➜ SCOREX	0.1884	0.1050	1.7944	-
H3	LEARNING ➜ SCOREX	0.6623	0.1373	4.8284	✓✓✓
H4	STAKEDEL ➜ SCOREX	0.1142	0.1213	0.9417	-

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 8.12. Validation of hypothesis testing – Municipality Y

Even in those cases where the hypotheses are not validated, the structural paths are clearly positive and represent areas where municipalities have to improve if they want to be regarded as organisations of Excellence by their citizens.

The current scores achieved by these three municipalities in the various scorecard dimensions are shown in Table 8.13 (which also includes the values obtained for the general sample).

Construct	Municipality B	Municipality X	Municipality Y	General Sample
ORGANISATIONAL VALUES	52.87	26.86	35.79	39.25
PROCESS EXCELLENCE	47.40	31.49	37.14	41.53
ORGANISATIONAL LEARNING	49.20	30.31	40.24	40.62
DELIGHT THE STAKEHOLDERS	50.36	30.92	38.81	39.55
SCORECARD EXCELLENCE	53.35	29.46	48.80	43.55

Table 8.13. Latent variables and Scorecard Excellence Indexes by Municipality

As indicated in Table 8.13, Municipality B achieves the highest Scorecard Excellence Index (53.35). This is mainly due to the positive scores obtained in *Organisational Values* (52.87) and *Stakeholders' Delight* (50.36), which have a strong impact on *Scorecard Excellence*, with marginal contributions of 0.393 and 0.475 respectively. There is, nonetheless, a large room for improvement. In terms of *Stakeholders' Delight*, the municipality should in particular implement procedures to better deal with citizens' suggestions and complaints (which has a outer coefficient of 0.317). Furthermore, although organisational values seem to be effectively communicated, citizens believe they are not guiding policies and strategies as much as they should and call for more alignment and consistency. This last aspect is a major component of *Organisational Values*, as the outer coefficient of 0.886 demonstrates.

For Municipality Y, the main strength seems to lie in its willingness to learn (40.24), which is a major predictor of Scorecard Excellence (β=0.662). Communication weaknesses and its incapacity of creating a sense of community are damaging the municipality's

performance in its citizens' eyes, pushing down the *Organisational Values* score (35.79) with consequences in all scorecard dimensions. This is particularly true for the *Stakeholders' Delight* perspective, where the average for each question is above 45 points, whereas the final index is only 38.81. The scenario just does not look worse because citizens regard the financial situation as very favourable (μ=6.26), as well as positively assess the role the municipality plays in developing the local community (μ=5.84) and its overall image (μ=5.82). Resources should be concentrated on solving the communication problems and encouraging teamwork. That would certainly contribute to improve *Process Excellence* and make the municipality more responsive to its citizens (with a large impact on *Organisational Learning* as suggested by the 0.479 outer coefficient).

Municipality X has a long way to go. Improvements are basically needed in every aspect, though priorities have to be established. *Organisational Values,* as the prime of the model, will necessarily be at the forefront. The municipality has to start building some sense of community and "walk the talk", as suggested by the high outer coefficients associated with these two variables – 0.528 and 0.453 respectively. Since the path coefficient linking *Delight the Stakeholders* and *Scorecard Excellence* is also very significant (0.614) that is another area that deserves particular attention. Municipality X has to start listening to its citizens, surveying their needs, and, in return, giving proper feedback on the results of the activities that are being carried out, so that citizens are kept informed on the progresses achieved. Only then will citizens perceive that things are changing and will be willing to give their own contribution to Organisational Excellence.

The Excellence Seeker's approach (see Tables 22, 23 and 24 in Appendix D) further supports these improvement strategies.

8.5. CONCLUSION AND RESEARCH IMPLICATIONS

The importance of promoting citizen participation in local governance – both from a political and a managerial point of view – combined with the lack of instruments to assess Local Government performance from an external stakeholders' perspective motivated the development of a Business Scorecard for the Portuguese municipalities.

Because the very motivation of Local Government's existence is to serve the local community, we concentrated on its citizens when developing and testing the Scorecard. This does not mean, however, that the framework could not (and should not) be also used to capture the views of other Local Government stakeholders.

Measuring Excellence according to citizens' perceptions not only contributes to a more accurate and realistic picture of organisational performance, but also gives important indications of the key areas where improvement is vital.

In order to promote OE, the Scorecard should be based on the CSFs identified earlier and embedded in KBEM. To gather meaningful feedback and encourage participation, the model should be simple and focused on the issues on which citizens have more relevant views. Broadly, these issues where grouped into four perspectives - Organisational Values, Process Excellence, Organisational Learning and Delight the Stakeholders – to form Kanji's Business Scorecard (KBS). Based on the literature review, these constructs are expected to affect each other, and, if properly addressed, lead to Scorecard Excellence.

With the purpose of validating the model and testing the hypothesis underlying the Scorecard, data were gathered from citizens in different municipalities.

Though this study is, to a certain extent, limited by the sample sizes, findings clearly indicate that the model proposed is adequate. Together, partial least square (PLS) estimates, t-values and R-squares all look supportive of the scorecard hypotheses. On the whole, for the various data samples, *organisational values*, *process excellence*, *organisational learning* and *stakeholders' delight* were indeed significant drivers of Scorecard Excellence. In particular, the role of *Organisational Values* as the prime of the municipalities' scorecard was confirmed by the high path coefficients linking them to the remaining model constructs.

Regardless of the expected differences among the samples analysed, findings consistently point out to the need to address the 'communication deficit' that exists between the Portuguese municipalities and its citizens. This 'deficit' makes the municipalities unresponsive to citizens' needs, prevents innovation and diminishes the mobilising role of the municipalities' values and projects.

The next chapter discusses how KBS and KBEM can be integrated to form a comprehensive system of performance measurement.

CHAPTER 9 – AN INTEGRATED SYSTEM FOR PERFORMANCE MEASUREMENT IN THE PORTUGUESE MUNICIPALITIES

The popularity of TQM essentially results from the belief that, if properly implemented, it will lead to superior performance. However, such link has been in practice difficult to establish, due to the complex and interdisciplinary nature of TQM and the diversity of factors that potentially influence organisational performance.

If we accept that the implementation of TQM principles and core concepts effectively leads to Organisational Excellence (i.e. superior performance in the key areas), as suggested by numerous researchers and also corroborated by the results of our study (see Chapters 6 and 8, in particular), it is important to understand the contribution of each quality critical factor to an overall measure of organisational performance.

The importance of measurement to management is often stressed. However, an exhaustive literature review on the subject goes well beyond the purposes of this research. Our focus is on the role of performance measurement in sustaining TQM principles and core concepts (i.e. the CSFs). With this purpose, Section 9.1 briefly analyses the past, present and future of performance measurement. Section 9.2 looks at the state-of-art of performance measurement in the Local Government and examines the limitations of existing frameworks.

From these discussions, a list of requirements for a successful performance measurement system emerges, to which the new approach, described in section 9.3, tries to give some answers. By combining the assessment of key organisational stakeholders, the new system is expected to provide an integrated view of performance. Section 9.4 shows the results of the application of such approach to the Portuguese municipalities and analyses possible improvement strategies.

Measuring performance remains a complex issue, especially in the Local Government, given the diversity of goals it pursues and the complexity of the political and social environment in which it operates. Yet, as stressed in the conclusion, the approach developed in this research makes, in our view, an important contribution to a better understanding of the subject.

9.1. PAST, PRESENT AND FUTURE OF PERFORMANCE MEASUREMENT

There is a large consensus around the idea that the way in which performance is measured, by focusing attention on particular areas, directly affects how an organisation acts. Taking this idea to the extreme, "a firm becomes what it measures" (Hauser and Katz, 1998).

The main purposes of a performance measurement system can be synthesised as follows (Neely and Bourne, 2000):

- to check progress towards the established goals;
- to identify major improvement opportunities;
- to achieve goal congruence and organisational alignment;
- to enhance accountability;
- to drive future resource allocation decisions; and
- to communicate to each individual how he/she can contribute to the overall strategy and thus to encourage and reinforce certain behaviours and attitudes.

To accomplish such purposes, a broad spectrum of measures[12] is required. In fact, performance is multidimensional; therefore a battery of indicators is needed (Jackson, 1995a).

Traditional performance systems tend to rely almost exclusively on financial measures, and fail to provide data on quality, responsiveness and flexibility, which are important sources of competitiveness and differentiation (Neely, 1999).

Criticisms usually highlight the backward-looking focus of financial measures, which reflect the consequences of decisions sometimes well after they were made. Thus, they are seen as lagging indicators with a lack of explicative and predictive power (Eccles, 1991; Epstein and Manzoni, 1998; Kaplan and Norton, 1992, 1996).

Additionally, traditional performance measurement, due to the lack of strategic focus, encourages a short-term vision (Butler *et al.*, 1997; Neely, 1999).

[12] The literature often makes a distinction between performance measures and performance indicators, the first ones referring to more unambiguous relationships between some activity and the outputs or outcomes associated with it (Jackon, 1995a). In this research, we use the terms indifferently.

Furthermore, traditional measures tend to concentrate on the individual or function, not on the process. Process management, which is an essential requirement for success, demands more transversal measures.

Several authors also stress another problem – the control bias. According to this view, conventional systems make individuals too concerned with conforming to standards, rather than promoting continuous improvement and organisational learning.

As a consequence of these drawbacks, traditional performance measurement systems promote local optimisation at the expense of a systemic view of the organisation. As Jackson (1995a) highlights, "focusing upon the maximisation of a performance target at the expense of others can result in the suboptimization of the system as a whole".

To overcome some of these deficiencies, Kaplan and Norton (1992) devised a balanced scorecard. The main message associated with Kaplan' and Norton's framework is the need to combine different measures (financial and non-financial) so that a correct picture of the organisation surfaces. The idea was not new (Sinclair and Zairi, 2000), however, as opposed to previous efforts, Kaplan and Norton's balanced scorecard (BSC) is more than an *ad hoc* collection of indicators. It is a comprehensive performance summary covering four inter-related perspectives: financial perspective, customer perspective, internal business perspective and innovation and learning (see Figure 8.2 - page 254).

Thus, the balanced scorecard complements financial measures with operational measures, which are the drivers of future financial performance, and, by emphasising the role of intangible assets, reflects the changing nature of competitive advantages (Kaplan and Norton, 2001).

With the BSC, managers are encouraged to analyse performance in several areas simultaneously (Hepworth, 1998, Letza, 1996). Therefore, it provides managers with a sense of interdependency and contributes to a holistic view of the organisation.

By the way it is developed – starting with the organisation mission and progressively translating the strategy into more concrete sets of actions and measures –, the BSC achieved recognition as a strategic management system. Because it involves the entire organisation, it facilitates the development of shared understandings.

Moreover, the BSC avoids information overload (it helps organisations to concentrate on a limited number of critical measures), while being flexible enough to fit each organisation in particular and accommodate a number of adjustments.

For public and non-profit organisations, where financial considerations, though important as enablers or constraints, are not the primary concern, the BSC presents the additional benefit of stressing the relevance of measuring success by reference to other non-financial criteria.

Nevertheless, the BSC is not without limitations. It is essentially a conceptual model, but it can hardly be considered a measurement model, since it does not clearly identify which are the variables, how they can be measured and how they relate to each other. The causality links suggested among the four perspectives are particularly problematic and ambiguous. It can be argued that there is an underlying reasoning: innovation and learning create the competencies and capabilities to improve internal business processes, which, on their turn, contribute to customer satisfaction thus ultimately leading to financial success. However, the interactions between criteria are not clearly shown.

Furthermore, the BSC focuses primarily on top-down performance measurement.

The areas in which measures of performance should be collected are suggested, but there is little guidance on how the appropriate measures can be identified and used to manage the business (Neely *et al.*, 2000).

Also, it does not explicitly incorporate competition or technological development variables, what makes the model somehow static.

The strengths and weaknesses of the BSC (Epstein and Manzoni, 1998; Kaplan and Norton, 2001; Neely *et al.*, 2000: Nørreklit, 2000) can be summarised as shown in Table 9.1.

Table 9.1. Strengths and Weaknesses of the Balanced Scorecard

(Based on Kanji and Sá, 2002)

Yet, the BSC is, in our view, a step in the right direction to the development of a new, simple and more integrated system of performance measurement.

Other so-called "second generation performance frameworks" (Neely *et al.*, 2001) followed. Among them, the Performance Prism (see Figure 9.1) is raising considerable interest.

Figure 9.1. The Performance Prism (Neely *et al.*, 2001)

As depicted, the Prism has five interrelated facets: Stakeholder Satisfaction, Strategies, Processes, Capabilities and Stakeholder Contribution (Neely *et al.*, 2001). It stresses that the organisation must start by considering who its stakeholders are and what they need. In order to provide value for the stakeholders, appropriate strategies are defined. Processes permit, at the operational level, to deliver the strategies. Capabilities (people, technology, practices) allow processes to be executed. Finally, if it is true that the organisation provides value for its stakeholders, they in counterpart contribute, in different forms, to the organisation.

Both the BSC and the Performance Prism are consistent with several TQM principles and core concepts.

The adoption of TQM raises new challenges to performance measurement. As Zairi (1994, p. 4) stresses, "TQM encourages companies to track down value-added activity in all areas of business operations, including the 'softer aspects' and the less traditional areas". To support TQM, the performance measurement system must (Zairi, 1994):

(a) have a customer focus;
(b) be based on a clear understanding of the organisation processes;
(c) encourage people involvement; and
(d) be properly planned, implemented and reviewed.

As a matter of fact, the foundation of the new performance system on the TQM elements is, in our view, a key requirement. Therefore, the link between TQM and organisational performance must be further investigated.

TQM advocates usually argue that TQM produces value through a variety of benefits (Powell, 1995): improved understanding of customers' needs, increased customer satisfaction, improved internal communication, better problem-solving, greater employee commitment and motivation, stronger relationships with suppliers, fewer errors and reduced waste. In line with this, all business excellence models suggest that adopting and implementing TQM principles and practices will lead to superior performance, at least in the medium- and long-run.

However, even though most researchers accept this to be true, and many *ad hoc* experiences support their position, it is very difficult to statistically prove the link between

TQM practices and organisational performance. This is due to a number of reasons (Hackman and Wageman, 1995):

- Measurement problems associated with even standard indices of performance;
- Exogenous disturbances that can interfere on the link between work processes and organisational outcomes;
- Temporal issues related to the time lag existent between the implementation of TQM practices and the moment when these practices start to produce results.

Several researchers have tried, in different sectors and countries, to empirically test the relationship between quality management and performance. Table 9.2 reviews major studies undertaken with that purpose.

Collectively, they give indications that TQM indeed leads to better company results, even if, for the reasons pointed before, statistical evidence that the relation exists and is positive is still weak. Some of the works also give support to the importance of both "soft" and "hard" TQM practices.

The methodology chosen to investigate the link between TQM and performance is obviously important. In this regard, structural equation modelling (as described in Chapter 5) has important advantages over traditional multivariate techniques. When using regression analysis between quality and performance items (Caruana and Pitt, 1997) it is difficult to reach a high value of R^2 because performance is likely to be influenced by other factors than quality, including environmental ones. The SEM methodology employed in this research avoids some multicollinearity problems that arise in the usual regression models from high correlations among the TQM dimensions (independent variables) and some aspects of organisational performance (dependent variables)

Research Study	Sample	Summary of Findings	Main limitations
Kano *et al.* (1983, mentioned in Dale *et al.*, 1997)	26 winners of the Deming Prize between 1961 and 1980	The financial performance of the winning companies is above the average of their industries	Comparison with industry average; performance measured only based on financial indicators.
US General Accounting Office (1991, mentioned in Dale *et al.*, 1997)	Top twenty scoring companies of the MBNQA in the 1988-1989 period	Most of the companies investigated experienced an increase in performance measures (market share, sales per employee, return on asset, return on sales, employee relations, customer satisfaction); Common features appearing in the high-scoring organisations are customer focus, leadership commitment, employee involvement, open corporate culture, fact based decision-making and partnerships with suppliers	Lack of a control group of non-TQM firms; statistical methods were not used to establish the link; reduced sample size
Bemowski (1991, mentioned in Terziovski and Samson, 1999) based on the International Quality Study conducted by Ernst & Young	More than 500 automotive, computer, banking, and health care organisations in the US, Canada, Germany and Japan	Three quality management practices – process improvement methods, strategic plan deployment and supplier certification programs - have a significant impact on performance regardless of industry, country, or starting positions.	Excluded small and medium-sized organisations; Scores for each measure are not provided; correlation analysis was not performed.
Flynn *et al.* (1995)	42 world-class manufacturing firms; multiple responses by plant	Using path analysis, models relating TQM dimensions and two measures of competitive advantage were tested; quality performance only explained around one-third of the variance in competitive advantage; top management support was found to be critical to both infrastructure and core quality management practices	No measures of financial performance were considered; performance only assessed from an internal perspective; lack of control of industry factors; cross-sectional design
Powell (1995)	54 firms, including TQM and non-TQM firms	Competitive advantages derive from the TQM behavioural and imperfectly imitable features; TQM produces economic benefits	Sample size; Cross-sectional design

Ahrire *et al.* (1996)	371 firms from the automobile and auto components industry	The formal implementation of a TQM campaign is not relevant to distinguish between TQM and non-TQM firms; what makes the difference between high and low performers is the true commitment and a holistic implementation of the various TQM elements	The outcome construct only represented product quality and no measure of financial performance was considered; The statistical significance of the impact of the various TQM dimensions on performance was not investigated
Forker *et al.* (1996)	65 firms from the furniture industry	Quality dimensions – especially design quality and product improvement – are highly correlated with business performance	Sample size; Performance only assessed from an internal perspective; Cross-sectional design
Adam et al (1997)	Manufacturing firms from 3 regions: Asia/South Pacific, Europe and North America	Research hypotheses were tested using a step-wise multiple regression; Increasing knowledge about quality, customer focus, and management involvement have a large impact on quality performance, measured in terms of quality costs and percentage of defective products; the effects of quality practices on financial results are significant but with low R^2; the relative importance of the quality practices is different from country to country	Lack of control of industry factors; Cross-sectional design
Forza and Fillipini (1998)	43 Italian manufacturing companies; multiple responses per plant	Using a structural equation model, the impact of different TQM practices on two quality measures – conformity and customer satisfaction – was found to be statistically significant	No measure of financial performance was considered; Lack of control of industry factors; Cross-sectional design
Terziovski and Dean (1998)	550 medium to large size Australian service organisations	Regression analysis was used to test hypotheses relating TQM adoption and service outcomes (productivity, competitive advantage, customer relationships and employee morale); "soft" practices, based on empowerment, strategic planning and customer/supplier involvement, are the most significant predictors of high quality service organisations	Lack of concrete financial measures; Lack of control of industry factors; Cross-sectional design

Wilson (1998)	41 European companies	Respondents report improvement in different areas following the implementation of self-assessment exercises	The statistical significance of the association between business excellence criteria (the enablers in particular) and organisational results is not investigated; Lack of a control group of non-TQM firms; Lack of control of industry factors
Terziovski and Samson (1999)	Around 1,200 Australian and New Zealand manufacturing companies	Factor analysis and multiple regression techniques were used; overall there is a strong relationship between TQM factors (based on the MBNQA structure) and some indicators of organisational performance, such as customer satisfaction, employee morale, delivery in full on time, productivity, cash-flow and sales growth; leadership, management of people and customer focus are particularly strong predictors; there are significant differences in the relationship across industry sectors and different size companies	Cross-sectional design
Ho *et al.* (2001)	25 electronics companies in Hong Kong	Using a multiple hierarchical regression analysis, findings suggest that both "personnel subsystem" and "technical subsystem" elements have impact on performance; core TQM practices mediate the effect of soft TQM practices on performance	Sample size; Cross-sectional design

Table 9.2. TQM vs. Performance - Summary of relevant empirical research

In this section, we reviewed some milestones in the evolution of performance measurement. Certainly, many other relevant frameworks exist which we have not specifically addressed, such as the SMART (strategic management and reporting technique) approach, commonly associated with the "performance pyramid" (Sinclair and Zairi, 2000), Keegan's *et al.* performance measurement matrix (Neely *et al.,* 2000), Fitzgerald's *et al* results and determinants model (Kloot and Martin, 2000), Hronec's "quantum performance measurement model" (Sinclair and Zairi, 2000) and Brown's framework (Neely *et al.*, 2000), not to mention more specific measurement models.

Table 9.3 summarises some key elements that distinguish traditional and innovative system of performance measurement (De Toni and Tonchia, 2001, Neely *et al.*, 2000; Palmer and Parker, 2001; Zairi, 1994).

Traditional PMS	**Innovative PMS**
Narrow, uni-dimensional focus (on financial measurements)	Broad, multi-dimensional focus (combining a variety of measurements)
Based on cost/efficiency	Value-based
Short-term orientation at the expense of long-term commitments	Long-term orientation, though balanced with the need to produce results on the short-run
Performance tracked in isolated areas	Performance simultaneously tracked in several interdependent areas
Emphasis on individual performance	Emphasis on team performance
Prevalence of functional measures	Prevalence of transversal (process) measures
Aim at controlling	Aim at empowering, evaluating, learning and improving
Deterministic view of the organisation and the context in which it operates	Accept uncertainty and need for permanent revision

Table 9.3. Performance measurement evolution

As mentioned earlier, the traditional approach to performance measurement is essentially based on cost accounting techniques and suffers from a series of limitations associated with them.

Moreover, the abundance of performance measures used, rarely integrated with one another, means that managers often suffer from "data overload" (Neely, 1999) and "analysis paralysis" (Jackson, 1995a). New performance measurement systems call for

greater integration among measures and managerial systems, so that efforts are co-ordinated and related to critical areas.

9.2. PERFORMANCE MEASUREMENT IN THE LOCAL GOVERNMENT – AN OVERVIEW

Performance measurement is a complex issue, especially in the Public Sector given its multiple goals, the diversity of political and social values involved, the intangibility of the majority of the services provided, and the uncertainty of the social-political environment in which it operates.

The provision of a public service is in itself an "act carried out in the public domain, for public purposes, which can always be challenged" (Stewart and Walsh, 1995). Consequently, performance indicators associated with them are also legitimate subjects for political argument and debate. As Flynn *et al.* (1995) argue, "economy, efficiency and effectiveness within the public sector cannot simply be regarded as technical terms or managerial tools because they are (...) structured by the political context in which they are operationalized".

Performance indicators in the Local Government have an internal role – assisting policy planning, motoring policies implementation, motivating public servants, helping to focus on customer/citizen needs and encouraging improvements – and an external role – providing a basis for judging performance and establishing public accountability.

Traditionally, the focus of Local Government performance was probity, i.e. the assurance of legal compliance and accuracy of financial statements (Rouse, 1999). Additionally, the attention was centred on budgetary performance, simply regarded as the adherence to the annual budget usually established according to the practice of incrementalism (Rouse, 1999). The same applies to the Portuguese Public Administration (Araújo, 2002). As Bilhim (1999) emphasises, incrementalism does not question the way things are done and automatically projects the past into the future. Besides propagating potential inefficiencies, it is inadequate to cope with environmental changes.

Over the last two decades, it has been possible to observe some major developments in the theory and practice of performance measurement in the Public Sector, most of which had

an impact on the Local Government as well. Broadly, the evolution is mainly associated with the New Public Sector Management movement (which was characterised in Chapter 1) and with growing accountability demands from citizens and elected officials. In some cases, it has also been complemented with the introduction of new legislation.

As a consequence of these changes, many public sector organisations currently regard the use of performance measurement as part of the movement towards service quality and the need to provide good value for money (Morgan and Murgatroyd, 1994). Additionally, there has been a general move to link resource allocation to performance (Boland and Fowler, 2000; Morgan and Murgatroyd, 1994), thus promoting greater efficiency and effectiveness in the use of the resources.

Similarly to the private sector, measuring performance in the Local Government is essential to evaluate whether or not strategic objectives are being met, where the major problems lie and how to improve in the future.

There are a few reasons that explain resistance to performance management in the Local Government.

Some of these motives have to do with the cultural model prevalent in the Public Sector. In fact, effective performance management calls for an organisational culture that promotes innovation and co-operation. If, by contrast, the organisation has a culture of blame, people will feel threatened by measures (Neely and Bourne, 2000; Rouse, 1999; Zairi, 1994). Co-operation facilitates the implementation of the performance measurement system since it makes information easy, cheaper and quicker to access and to share. As we discussed earlier in this research, bureaucracy promotes functional boundaries and creates inertia, which, taken together, put at risk the efficiency and effectiveness of performance measurement.

Moreover, there is a difficulty in linking rewards to performance improvements. According to Kloot and Martin (2000), the "old public service paradigm" jeopardises performance measurement because "there are no rewards in getting it right and few sanctions for getting it wrong".

A further reason for some suspicion is the fact that performance measurement makes responsibilities explicit and provides evidence of success or failure (Jackson, 1995a), thus

making political leaders and public sector managers more vulnerable to public judgement. Ammons (1995) argues that, in a defensive response, most local authorities rely on incipient measures and avoid report as much as they can. Thus, the essence of accountability in the Local Government is at stake.

Finally, another explanation lies in the very own system used for measuring performance, which often does not provide the necessary elements to stimulate improvement. In contrast, there is often a sense that performance measurement, especially when focused exclusively on productivity and efficiency measures, is a way of legitimating cost-cutting and downsizing strategies at the expense of quality (Hodgkinson, 1999).

Financial measures, particularly those concerning spending patterns and budgetary data, are traditionally at the core of performance measurement in the Public Sector. Due to the limitations discussed in the previous section, and the need to increase accountability to different stakeholders, other performance indicators have been recently introduced. Customer service and quality are two areas in which non-financial performance measures are being developed (Kloot, 1999).

If we regard organisations as systems, the main components of performance measurement are necessarily inputs, outputs and outcomes. There are, however, problems associated with the measurement of each of these aspects, especially in what concerns to outcomes (Sanderson, 1994).

For the inputs part, accountancy and financial measures work quite well, even if they do not consider many intangible assets such as staff competencies or organisational know-how.

In terms of outputs, headcounts and workload are the most common type of measures (Gaster, 1995), but they say very little about the level of service achieved and how the customers perceive it. Moreover, the pressure for high headcounts can lead to counterproductive consequences in terms of quality.

Assessing outcomes requires measuring the impact of a service/activity upon its recipients, including its consequences or effects. As Rouse (1999, p. 77) notes, outcomes "can be interpreted as the value placed by society on the public service" and this is extremely difficult to estimate.

To combine inputs, outputs and outcomes, the notions of economy, efficiency and effectiveness (commonly known as the three Es) became very popular (see Figure 9.2).

Figure 9.2. The Three Es - linking the concepts

(Adapted from Skelcher, 1992a, p. 42)

In simple terms, economy refers to the standardised cost of the resources used; efficiency concerns the relationship between the outputs created and the resources consumed; and effectiveness is a measure of the extent to which the objectives are achieved (Sanderson, 1994).

Sanderson (1994) adds equity to these three levels of performance measurement. He argues that the measurement of equity is necessary "to ensure that the distribution of outputs is consistent with the policy of the (local) government with regard to the distribution or redistribution of resources and services to the population as a whole" (Sanderson, 1994, p. 126).

The progressive awareness that performance had to take into account the relationship between what is being spent (resources) and what is being achieved (outputs and outcomes) is behind the emergence of concepts such as 'value for money', which involves the simultaneous attainment of economy, efficiency and effectiveness (Rouse, 1999).

However, as Jackson (1995b) stresses, several aspects are usually left behind, such as evaluating if there is a proper match between the levels of demand and supply, if the

service mix is the correct one and if the service is being targeted on the appropriate user groups.

Research reveals that, while performance data is regularly collected in most municipalities (Carter, 1994; Garsombke and Schrad, 1999; Kloot, 1999; Poister and Streib, 1999), the impact of performance measures on allocation decisions is minimal (Rivenbark and Kelly, 2000).

According to Kloot and Martin (2000), performance management in the Local Government is "still largely grounded in operational concepts of efficiency, with a lower emphasis on effectiveness". This view is consistent with findings from a survey conducted in the UK (Palmer, 1995), which reveals that the types of indicators most frequently collected by local authorities relate to costs, volume of service, utilization rate, time targets and productivity, while indicators of quality of service, customer satisfaction and the achievement of goals are rare. The emphasis is thus on economy and efficiency, rather than on effectiveness.

As Carter (1994) highlights, there is a tendency to design performance systems that are "data driven", based on information that is easily obtained, but not necessarily relevant, reliable or useful.

Standards currently occupy a central role on performance management in the Public Sector, with public organisations being increasingly under pressure to meet them (Boland and Fowler, 2000; Brennan and Douglas, 1998; Coe, 1999; Donnelly, 1996). They can be used to promote quality and confidence in public services and their publication makes explicit the level of service provided by a local authority (Brennan and Douglas, 1998). Moreover, comparisons with standards have the advantage of capturing public attention (Ammons, 1995; Ridley, 1995).

The importance of measuring performance against the standards is behind the development of league tables, particularly in the UK. In Portugal, these performance comparison frameworks do not exist in the Local Government. In some cases, such as the education sector, the government is collecting some performance measures, but their disclosure to the public in general is facing intense controversy and debate. As in the UK, public servants, and local government officers feel extremely unease with the establishment of such frameworks. It is often believed that they are rudimentary forms of comparison that do not

take into consideration situational variables (Boland and Fowler, 2000; Jackson, 1995a). Moreover, imposed from the outside, as it happens frequently with this kind of initiatives, performance measurement is seen as a threat.

As in any other environment, successful implementation of a performance measurement system requires the involvement of people at all levels so that a sense of ownership is created and acceptance of the indicators maximised (Jackson, 1995b; Poister and Streib, 1999; Rouse, 1999; Zairi, 1994). Additionally, it is important to ensure that 'environmental' factors outside the control of the organisation, unit or individual are identified (Carter, 1994).

Acceptance of the system of performance measurement also depends on the existence of the necessary incentives to use performance indicators (Carter *et al.*, 1992). This raises once again the problems of performance appraisal and performance related pay in the Public Sector, both at the individual and at the institutional level.

To sum up, current performance measurement systems in place in the Local Government have two major drawbacks:

- First, traditional key management indicators, mainly expenditure figures and ratios, still dominate; and

- Second, performance is rarely evaluated from the customers' perspective. Customer surveys and focus groups are not yet widely used. The main external indicator for evaluating the performance of local authorities still tends to be public support and voting behaviour at election time. This form of feedback, though important for the formulation of policies at the highest level, is clearly not enough for effective management on a daily basis and does not provide sufficient information on how services are run and delivered.

Therefore, a more sophisticated, integrated and effective system of performance measurement is needed to support local authorities in their quest for Organisational Excellence.

The system described next is based on the CSFs for OE and provides performance measures that take into account different stakeholders' perspectives.

9.3. DEVELOPING A COMPREHENSIVE SYSTEM FOR PERFORMANCE MEASUREMENT

This section discusses the requirements for the new Performance Measurement System and explains how KBEM and KBS can be integrated to form Kanji-Business Excellence Measurement System (KBEMS). Finally, the meaning of the final Organisational Performance Index is examined.

9.3.1 Requirements for the New Performance Measurement System

From the issues raised in section 9.1, it is possible to identify the main requirements that a performance measurement system should meet (Bilhim, 1999; De Toni and Tonchia, 2001; Gaster, 1995; Rouse, 1999; Sanderson, 1994):

- be based on a holistic and systemic view of the organisation;
- derive from the organisation mission and thus be mutually supportive and consistent with the organisational goals and critical success factors;
- be at the same time comprehensive and simple, so that it is cost-effective;
- define the data collection methods and how the performance indicators are calculated;
- achieve staff ownership of the process;
- make the results available in a form that is useful, comprehensive and timely;
- provide a set of measurements that allow all members of the organisation to understand how they affect the entire business;
- be linked to the system of rewards;
- give feedback that is used for improvement and learning;
- be periodically revised.

If the process of designing the performance measurement system is properly conducted, it will result in a set of indicators that satisfy, as much as possible, the following criteria (Palmer, 1995): consistency, comparability, clarity, controllability, contingency, comprehensiveness, boundedness, relevance, and feasibility.

Clearly, the quality of performance measures is critical in establishing the credibility of the performance system and essential to build local government officers' confidence in it (Bernstein, 2001).

In addition, as section 9.2 highlighted, a performance measurement system for the municipalities needs to be tailored to their individual needs, using a terminology that they understand and addressing the issues that are critical to them. Above all, it needs to:

- Have the support of a wide range of local government actors. Consensus around the objectives and development of reinforcement schemes to align behaviours with the system goals are essential (Bilhim, 1999).
- Measure success in terms that are relevant to the Public Sector, taking into account its mission and strategic goals.

  Performance criteria are by definition value-laden (Jackson, 1995b; Rouse, 1997). In the Local Government the political dimension of performance management cannot be ignored. It must be recognised that economy, efficiency and effectiveness are not neutral concepts (Skelcher, 1992a) and will necessarily reflect different perspectives and values associated with the organisation's political context. Consequently, performance necessarily becomes a matter of political judgment (Rouse, 1999). Measurements should reflect the definition of quality adopted and the strategic objectives established (Gaster, 1995). A coherent performance framework cascaded and integrated throughout the organisation to ensure value alignment is essential (Rouse, 1999). Moreover, the existence of a strategic focus encourages and facilitates organisational learning (Rouse, 1997).
- Consider the different needs of managers, local government officers and the public in terms of information requirements (content and level of detail).
- Measure performance from the perspective of different stakeholders (internal and external).

The need to develop a pluralist approach to assess quality and organisational performance has recently been emphasised in the literature (Carter *et al.*, 1992; Kanter and Summers, 1994; Rouse, 1997; Rowley, 1998).

As Kaplan (2001) points out, success for public organisations should be measured "by how effectively and efficiently they meet the needs of their constituencies".

Jackson (1995a) argues that "the performance of any organization is the extent to which it achieves the results the members of society expect". The problem is, as the author

emphasises, that different groups have different interests. This is particularly true in the Local Government, where the existence of multiple and fragmented stakeholder groups – service users and consumers, local communities, elected members, employees, regulatory authorities and auditors, other public institutions, private sector and voluntary sector partners, other levels of government, and the society in general (Donelly, 1999; Morgan and Murgatroyd, 1994; Rouse, 1999) – creates both complexity and dynamism.

A large number of interactions and trade-offs must be managed in order to satisfy the interests of differing stakeholders (Brignall and Modell, 2000). As Westlund (2001) stresses, measuring how quality is perceived by the organisation's stakeholders allows the identification of the relative importance of various dimensions to different groups. Ultimately, as Smith (1993) points out, "politics is the balancing of conflicting priorities" and a pluralistic approach to performance measurement is essential to support the formulation and implementation of policies.

9.3.2. Kanji-Business Excellence Measurement System (KBEMS)

The new Performance Measurement System proposed in this research – Kanji-Business Excellence Measurement System (KBEMS) – results from the integration of KBEM and KBS.

The system (see Figure 9.3) is composed of two inter-related parts. Part A corresponds to the criteria that form KBEM (see Chapter 6), whereas Part B comprises the KBS criteria (see Chapter 8).

Figure 9.3. Kanji Business Excellence Measurement System (KBEMS)

(Kanji and Sá, 2001b)

It is important to emphasise that, although we distinguish between Part A and Part B, they must be applied simultaneously.

As a matter of fact, as explained in Chapter 8, KBS essentially covers the same CSFs as KBEM. The main difference is the level of aggregation and detail. KBS is more synthetic and concentrates on the issues that are more relevant to the external stakeholders. Since different stakeholders groups have distinct needs and areas of expertise, the questionnaires associated with KBS possibly need to be customised accordingly. This is in line with Jackson's (1995a) view that different stakeholders require different performance indicators.

KBEMS is very comprehensive in that it includes measurements on a variety of dimensions. However, contrary to traditional approaches, such measures are integrated. In effect, the very existence of a performance measurement system presupposes integration (Sinclair and Zairi, 2000).

In our case, the integration fundamentally comes from the fact that all key performance indicators derive from the critical success factors identified. In the models that form KBEMS the relationships among these CSFs are established. Subsequently, the application of the SEM methodology allows the estimation of the interactions between the key drivers of organisational performance.

Conceiving a performance measurement system based on the identification of the critical factors affecting performance and then analysing and quantifying the relationships among them finds support in the literature (Bititci *et al.*, 2001).

The approach associated with the design and implementation of KBEMS can be briefly summarised as depicted in Figure 9.4.

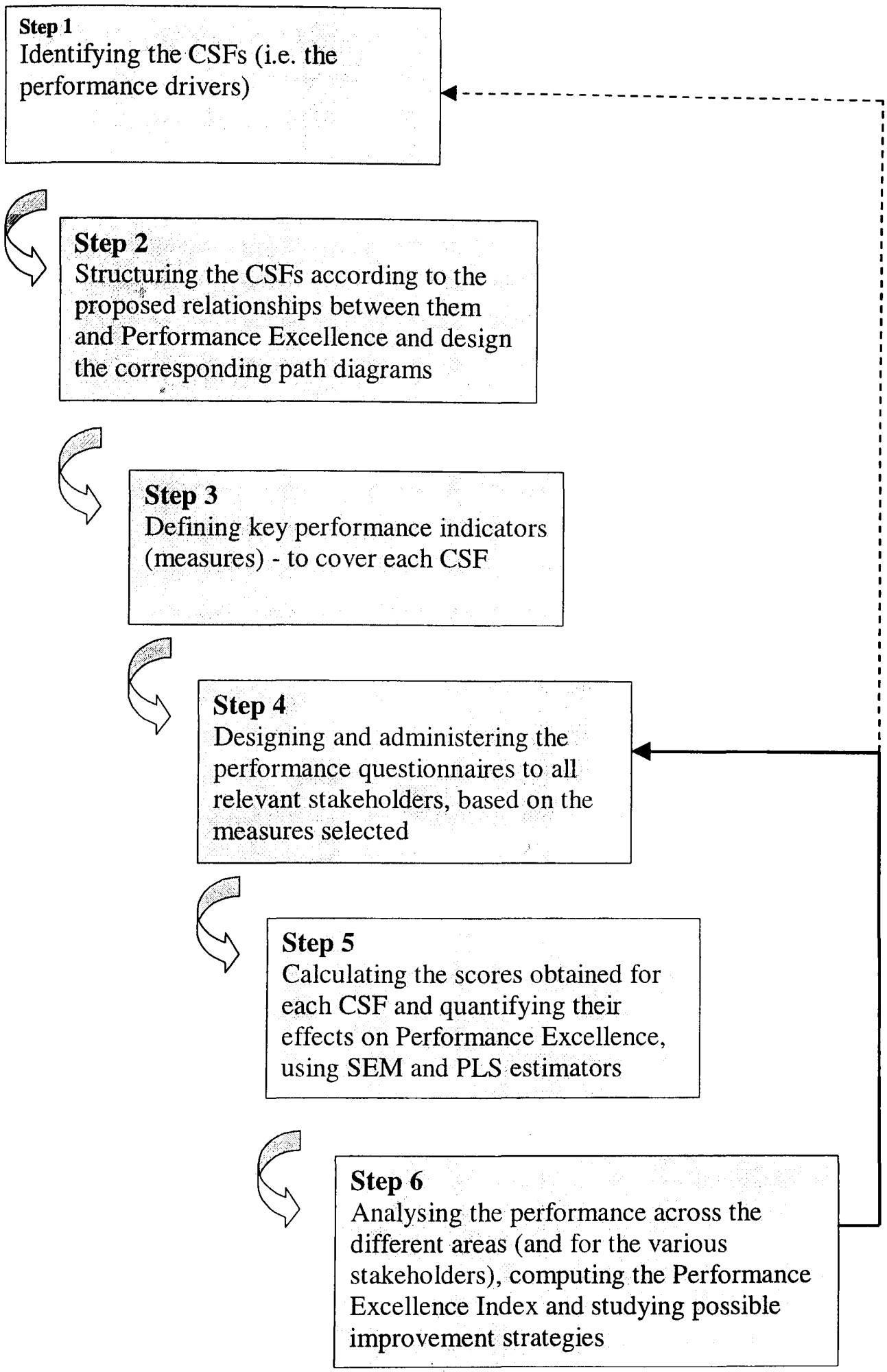


Figure 9.4. KBEMS approach

The application of KBEMS allows performance to be compared within the organisation, with other competitors and over time. This is due to the existence of a single number that reflects the organisation's performance in each CSF (or model dimension). The system culminates with the computation of the Organisational Performance Index, combining the results obtained in Part A and Part B.

The final organisational performance index (OPI) – which gives an aggregate measure of the excellence of the organisation in managing all the CSFs – is simply the average between the scores of Performance Excellence A and Performance Excellence B, i.e.:

$$\text{OPI} = \frac{A+B}{2} \times 10$$

Since, potentially, KBS is applied to various stakeholders, the organisation is likely to have *n* different scores for Part B (for customers, suppliers, Government, etc). In this case, the B score to be included in the formula above is a mean of the scores obtained, i.e.:

$$\text{B} = \frac{\sum_{i=1}^{n} B_i}{n}$$

Clearly, the formulas suggested here are very simple and generic. Each organisation in particular may want to value Part A and Part B unequally or assess differently the importance of various stakeholder groups. In these situations, the formulas described above can be changed by assigning different weights to A, B and B_i.

Next section reports the results of the application of KBEMS to the Portuguese municipalities.

9.4. PERFORMANCE PROFILE OF THE PORTUGUESE MUNICIPALITIES

The system of performance measurement presented combines the measurements obtained in KBEM (Chapter 6) and KBS (Chapter 8) to integrate the views of the key stakeholders of a municipality and calculate an overall performance excellence index. The various critical success factors correspond to the criteria against which performance is assessed.

Before proceeding, it is important to notice that the measurement system proposed in this research is not, by any means, incompatible with the performance criteria suggested in the

literature. In fact, not only it provides a pluralistic approach, measuring performance from the various stakeholders' perspectives, but also includes measures of economy, efficiency, effectiveness and value for money, which, as observed earlier, are the concepts more commonly associated with performance in the Public Sector. The measurement items that represent the performance excellence construct (see Table 9.4) clearly illustrate this point.

Measurement Items
• Goals achievement (GLACHIEVE)
• Overall image (IMAGE)
• Financial situation (FINANCE)
• Demand for the services provided (DEMAND)
• Value-for-money (VFM)
• Impact on quality of life of the local communities (QUALIFE)

Table 9.4. Performance Excellence Construct

The quality of the systems currently used by the municipalities to measure performance is a major concern. Therefore, both internal and external stakeholders were asked about issues of relevance, comprehensiveness, accuracy, timeliness and credibility of the information collected and disclosed.

In addition, the need to have any kind of reference/standard against which the municipality performance can be judged was emphasised through the inclusion of a question specifically addressing the use of benchmarking.

Next, in Section 9.4.1, KBEMS is applied to describe the overall performance profile of the Portuguese municipalities and to detect major problems (performance gaps). Then, Section 9.4.2 illustrates in more detail how the system works with reference to a municipality in particular.

9.4.1. Overall Results

Table 9.5 summarises the results obtained by the Portuguese municipalities in each criterion of the performance measurement system.

PART A - KBEM		**PART B - KBS**	
Criteria	**Score**	**Criteria**	**Score**
Leadership	63.4	Organisational Values	39.3
Delight the Customer	70.5	Delight the Stakeholder	39.6
External Customer/Citizen Satisfaction	64.6		
Internal Customer Satisfaction	68.3		
Management By Fact	59.0	Process Excellence	41.5
All Work Is Process	59.2		
Measurement	48.4		
People Based Management	62.7		
Teamwork	66.2		
People Make Quality	60.3		
Continuous Improvement	67.0	Organisational Learning	40.6
Continuous Improvement Culture	62.8		
Prevention	63.5		
Performance Excellence A = 74.4		**Performance Excellence B* = 43.6**	
Performance Excellence Index = 590 points			

* In this case, performance was measured only internally and from the citizens' perspective. When additional stakeholders are considered, Performance Excellence B becomes an average (either simple or weighted) of the various scores obtained in KBS.

Table 9.5. KBEMS results

The final performance excellence index – 590 points – is encouraging. However, the fact that internal and external views diverge so noticeably is a major cause for concern.

In Part A, higher scores are achieved for *delight the customer* (70.5), *internal customer satisfaction* (68.3) and *continuous improvement* (67.0), whereas performance is more modest in dimensions such as *measurement* (48.4), *all work is process* (59.2) and *management by fact* (59.0). In Part B, however, the scores obtained in all criteria are well below 50 points.

This shows that political leaders and top managers' (who answered the KBEM questionnaire) assessment of the municipality performance is rather different from that of the citizens they represent (whose views where collected in KBS).

Some degree of disparity would always be expected, due to the complexity of the objectives pursued by local authorities and the different priorities assigned by the stakeholders to the various purposes. The discrepancy is nevertheless too large and reveals that too often the municipalities are not addressing and measuring what is important to their citizens. Leaders and top managers are probably just assuming they are doing the right things and conveying the appropriate message, whereas citizens do not feel listened to and think the municipality is unresponsive to their needs and demands.

Given that the critical success factors are roughly the same in both situations, the question is not as much which areas to improve – although measurement, process management and decision-making processes are natural candidates – as it is how to change internal and external perceptions to make them more realistic and close to each other.

Confronting KBEM and KBS results helps to identify where the major problems lie and where the municipalities should concentrate their efforts to improve in citizens' eyes.

Table 9.6 aims to establish the basis for such analysis by comparing items that exist in both KBEM and KBS with a very similar meaning. Items that were excluded from the table are still relevant, but cannot be so easily confronted.

ITEM	INTERNAL ASSESSMENT (KBEM)		CITIZENS ASSESSMENT (KBS)	DIFF.*
• Communication of what the municipality stands for (values, vision, principles and projects)	SHARED = 6.56 VISCOM = 6.88	6.72	5.14	1.58
• Strategy and policy alignment	6.89		4.60	2.29
• Co-ordination and teamwork	COORD = 6.07 ENCOUR = 7.00 CROSS = 6.91	6.66	4.48	2.18
• Performance measurement	PERFMES = 6.34 COMPAC = 5.55	5.95	4.78	1.17
• Benchmarking	6.16		4.85	1.31
• Continuous improvement culture	7.12		4.54	2.58
• Leadership accessibility and approachability	7.62		4.76	2.86
• Responsiveness to changes in citizens' needs and demands	7.09		4.68	2.41
• Services and processes innovation	5.81		4.45	1.36
• Awareness of citizens' needs and preferences	EXPECT = 7.19 FOCUS = 7.40	7.30	4.50	2.80
• Quality of information disclosure and communication	6.35		4.59	1.91
• Suggestions and complaints management	7.24		4.10	3.14
• Value-for-money	7.22		4.38	2.84
• Financial situation	7.40		5.08	2.32
• Overall image	7.44		5.17	2.27
• Contribution to the development of the local community and quality-of-life improvement	8.56		5.42	3.14

* Note: There is not a one-to-one correspondence between the responses from internal and external stakeholders. As explained in Chapters 6 and 8, 85 institutions are represented in KBEM, with one response per institution, while 130 citizens belonging to 56 different municipalities are included in KBS.

Table 9.6. Item Comparisons – Mean Values

Gaps between internal and external perceptions are significant in most areas. Still, it is possible to stress the following key problems:

- Municipalities have a *know-it-all* attitude and tend to assume that they are doing the right thing. There is a tendency to limit listening attitudes and consultation exercises to election times. Apart from that period, leaders are regarded as unapproachable (4.76), although they think the contrary (7.62). Citizens are particularly suspicious about

complaints and suggestion schemes. Local government leaders and managers tend to see their formal existence as sufficient (7.24), while citizens doubt of the municipality's ability to adequately handle and use suggestions and complaints for improvement (4.10).

- Internally, there is a stated willingness to improve and learn from others (7.12), but the idea is not shared by citizens (4.54), probably because they are not being properly involved in the process or their views taken into consideration;

- Lack of mechanisms to measure customer satisfaction (acknowledged by leaders and managers) and insufficient citizens' involvement explain why municipalities are seen as unresponsive (4.68). Both internal and external stakeholders recognise the difficulty of being innovative (5.81 against 4.45).

- Internal and external views converge on the weakness of the performance measurement systems in place (5.95 and 4.78, respectively) and citizens also claim that there is not enough information disclosure and dissemination (4.59). They do not know how the resources are being used, whether or not the goals are being achieved and if the political projects they voted for are being pursued. In this scenario, it is not surprising that "good value for money" is negatively assessed (4.38). Clearly, this is not just a problem of information disclosure, since legislation currently ensures public assess to a range of reports, documents, and even, in some cases, council meetings. Most likely, the question is much more the way the information is communicated and presented. In an effort to change this situation, many municipalities in Portugal are making use of the new technologies and developing homepages on the Internet to communicate and inform local communities;

- Being closer to citizens would also contribute to shorten the difference between leaders' and citizens' perceptions of the municipality impact on the quality-of-life of the local community, even if, in this regard, all acknowledge the importance of the Local Government role.

More customised recommendations can only be made for each municipality in particular, taking into account the whole set of results provided by KBEMS. An example is provided next.

9.4.2. A Close Look Into a Municipality in Particular

In this section we present the case of Municipality B, where measurements were collected from the institution's leader, employees and citizens.

The scores achieved for Part A and Part B of KBEMS are shown in Table 9.7.

PART A - KBEM		**PART B - KBS**	
Criteria	**Score***	**Criteria**	**Score****
Leadership	47	Organisational Values	53
Delight the Customer	49	Delight the Stakeholder	47
External Customer/Citizen Satisfaction	49		
Internal Customer Satisfaction	44		
Management By Fact	47	Process Excellence	49
All Work Is Process	41		
Measurement	40		
People Based Management	31		
Teamwork	39		
People Make Quality	36		
Continuous Improvement	49	Organisational Learning	50
Continuous Improvement Culture	45		
Prevention	40		
Performance Excellence A = 53		**Performance Excellence B = 53**	
Performance Excellence Index = 530 points* **			

* The scores for KBEM are mean values for each criterion, given the reduced number of questionnaires to perform the structural analysis.
** Additional results can be found in Chapter 8 (section 8.4.2) and in Appendix D.
*** Once again, the only scorecard is that of citizens. In the future it is advisable to consider additional external stakeholders and calculate the Performance Excellence Index as explained in Section 9.3.2.

Table 9.7. KBEMS results for Municipality B

One immediate observation is that internal and external stakeholders perspectives are relatively close. In fact, with the possible exception of citizen satisfaction (where internal assessment is slightly better), the scores obtained for Part B are inclusively a little higher.

Major strengths can be found in the organisational values and the municipality eagerness to continuously improve and learn, even if there is still a prevention deficit.

Process excellence and measurement, in particular, are main weaknesses. Also, people management is a crucial area where improvement needs to occur. Citizens are not directly assessing this dimension, but the lack of teamwork, training and staff motivation may well be undermining the municipality's ability to understand citizens' needs and its capacity to be more responsive to them, ultimately leading to a less than satisfactory level of stakeholders delight.

These thoughts are at some extent confirmed by the results presented in Table 9.8.

ITEM	INTERNAL ASSESSMENT (KBEM)		CITIZENS ASSESSMENT (KBS)	DIFF.
• Communication of what the municipality stands for (values, vision, principles and projects)	SHARED = 4.93 VISCOM = 5.89	5.41	5.94	-0.53
• Strategy and policy alignment	5.67		5.73	-0.06
• Co-ordination and teamwork	COORD = 4.04 ENCOUR = 3.52 CROSS = 3.93	3.83	4.36	-0.53
• Performance measurement	PERFMES = 4.41 COMPAC = 3.74	4.08	5.36	-1.28
• Benchmarking	4.33		5.58	-1.25
• Continuous improvement culture	5.33		5.18	0.15
• Leadership accessibility and approachability	4.26		5.64	-1.38
• Responsiveness to changes in citizens' needs and demands	4.85		6.15	-1.3
• Services and processes innovation	4.41		5.97	-1.56
• Awareness of citizens' needs and preferences	EXPECT = 5.30 FOCUS = 5.33	5.31	5.67	-0.36
• Quality of information disclosure and communication	5.26		5.30	-0.04
• Suggestions and complaints management	5.07		5.42	-0.35
• Value-for-money	4.85		4.88	-0.03
• Financial situation	3.00		4.67	-1.67
• Overall image	6.00		6.73	-0.73
• Contribution to the development of the local community and quality-of-life improvement	6.85		6.85	0

Table 9.8. Item Comparisons for Municipality B – Mean Values

Actually, not only it is verified that internal and external views converge overall, but also that there is some degree of consistency in the identification of areas of relative strength and weakness.

It is essential to stress the importance of both employees and citizens knowing what the municipality stands for (5.41 and 5.94, respectively) and agreeing on the proper alignment between values, strategies and policies (5.67 and 5.73). This clearly leads to credibility and trust. More importantly, the values of the municipality seem to support a continuous improvement culture (5.33 and 5.18) focused on the satisfaction of citizens' needs (5.31 and 5.61). It is rather significant to notice the way citizens assess how the municipality handles complaints and how it responds to changes in the environment. These two items receive scores of 5.46 and 6.15, respectively (figures that are inclusively above internal perceptions). Jointly, they certainly contribute to the positive image the municipality has for both internal (6.00) and external stakeholders (6.73).

Main problems appear to be related with people-based management issues. In fact, employees believe there is not enough co-ordination and teamwork (3.83) and do not think leaders are much accessible and approachable (4.26). This probably reflects the Local Government bureaucratic inheritance, where organisational structure and communication channels are highly hierarchical and functional barriers dominate, making innovation difficult and slowing responsiveness.

Finally, the performance measurement system seems to take into consideration citizens' information needs, as shown by the results obtained in performance measurement (5.36) and quality of information disclosure and communication (5.30). However, from an internal stakeholders perspective, the performance measurement system has important drawbacks. It must become more comprehensive and accurate (3.74) and able to support benchmarking, which is still insufficient and unsystematic (4.33).

The next step in designing and evaluating improvement strategies would take into consideration other results from the structural analysis, namely the information provided by inner and outer coefficients. Section 8.4.2 gives details on how to improve Part B indices for Municipality B. Unfortunately, given the reduced sample size, it was not possible to estimate the structural model for Part A. Confronting the indications provided

by the application of the Excellence Seeker's Approach to both parts of KBEMS would give further insights into the more effective and efficient path for improvement.

9.5. CONCLUSION AND RESEARCH IMPLICATIONS

Local Government reform and modernisation is on the political agendas in most countries. To support them, accurate, relevant and timely information on performance is essential.

In the Public Sector, performance measurement has traditionally suffered from several problems, among which (Van Wart, 1995): weak comparability, lack of rewards for efficiency, inability to assess true effectiveness, failure to measure team and system performance, and a deficiency in identifying and correcting systemic errors.

Managing performance in the municipalities requires more than working within the budget. Financial and non-financial measures, comprising both results and determinants of success, are necessary.

Moreover, it is increasingly acknowledged that Local Government has a variety of stakeholders and that their needs represent different focal points for evaluating and assessing performance (Morgan and Murgatroyd, 1994).

The literature review suggested that lack of integration remains an important shortcoming of most performance measurement approaches.

Results from our empirical research, discussed in previous chapters, strongly indicate that an integrated framework for performance measurement should be based on TQM principles and core concepts. In fact, as Chapter 6 and Chapter 8 report, the quality management dimensions embedded in KBEM and KBS are strongly associated with an overall aggregated measure of Organisational Excellence.

If we add to this the possibility, offered by the structural equation modelling approach, of determining how each dimension impacts on OE, we will clearly have a sound basis for understanding the dynamic behaviour of factors affecting performance and for conceiving improvement strategies that will produce results.

The development of a comprehensive and accurate system for performance measurement is, nevertheless, far from being achieved. Not only any model necessarily corresponds to a simplified vision of the reality, but also the environment that organisations face is dynamic and uncertain. This means that the criticality of performance measures and CSFs change over time and that using the methodology proposed for accurately predicting future performance levels is problematic.

The application of an integrated system for performance measurement – KBEMS – in the Portuguese Municipalities drew attention to major gaps that exist between internal and external stakeholders' perceptions. These divergences revealed that municipalities are not measuring citizen satisfaction or collecting feedback on a regular basis to improve the services provided. As a consequence, citizens tend to see municipalities as bureaucratic institutions, unresponsive to their needs.

This scenario exposes two main problems:

- Communication difficulties between politicians, local government officers and the citizens they represent, meaning that leaders think they are doing the right thing, while citizens feel they are not being listened to. This causes misunderstanding about the purposes, objectives and constraints of local government activities and, ultimately, conveys a negative image of the municipality;

- Deficiencies of the systems currently used to measure economy, efficiency and effectiveness. Measures are collected *ad hoc*, are not reliable and are not being used to guide policy-making and strategy review. Decisions are thus merely based on intuition, not on facts.

Together, they show that the performance system that should "enable the general public to make informed judgements" (Jackson, 1995a) is not accomplishing this purpose and, therefore, is not supporting political accountability.

In the Portuguese case, the problem is further complicated by the lack of immediate incentives to measure performance, since Central Government grants and other resource allocation decisions often do not depend on the results achieved. Even on an individual basis, it is very difficult to punish under-performance or to distinguish people who excel.

Yet, increasing citizens and customer demands for higher quality services, the need to cut public expenditure, and, above all, the importance of bringing Public Administration and citizens closer call for innovative systems of measuring (and reporting) performance.

The main problem is how to overcome the resistances that previous frustrated experiences caused, largely due to improper design, careless implementation and lack of sensitivity to public sector values and particularities.

Finally, it must be stressed that performance is not politically neutral. It necessarily "reflects the values placed upon the activity of government" (Jackson, 1995a). The methodology presented in this research has the main advantage of ensuring that the performance measurement system is linked to the municipality's values, mission and strategy.

CHAPTER 10 – SUMMARY AND CONCLUSIONS

Within the vast and complex network of public sector organisations, Local Government institutions provide an interesting field of research.

Given its diversity, wide stakeholder base, and large impact on the community it serves, Organisational Excellence in the Local Government is particularly difficult to define.

Any quest for Organisational Excellence in the Public Sector, in general, and, in particular, in the Local Government, needs, in our view, to acknowledge the existence of two distinct, but interdependent, levels of analysis – one typically political and another essentially managerial. Finding an appropriate balance between conflicting demands is essentially a political and judgmental issue. However, once defined the overall goals and priorities, there is hard work to be done in terms of communicating the mission, vision and objectives, designing consistent strategies, aligning the organisation's structure, and mobilising human and material resources to accomplish the purposes.

In this research, rather than regarding the political context merely as a managerial constraint, we prefer to integrate both levels in the assessment of Organisational Excellence.

Political views are embedded in the organisational values and vision, which are important foundations of the models used in this research. Besides, we consider political leaders and citizens as key Local Government stakeholders whose feedback is required to measure the municipalities' performance.

At the more operational level, strategies and plans must be in place so that the Local Government organisation is able to deliver what it stands for, making the best use of the resources available.

If the values, mission and vision are properly defined and communicated, and stakeholders' expectations adequately identified, the organisation will provide good value for money, be financially healthy, and have a good overall image. In a word, Organisational Excellence will result.

This research intended to analyse the drivers of Organisational Excellence with reference to the Portuguese Local Government.

With this purpose, throughout the various chapters of the thesis, relevant literature was critically reviewed, methodological choices were justified, models developed, tested and empirically validated, and results of their application presented and discussed.

This final chapter gives an overview of the research, summarises the key findings, evaluates its main contributions and limitations, and suggests areas for future research.

10.1. OVERVIEW OF THE RESEARCH

- Research problem and focus

Our research problem was to identify the factors that potentially lead to Organisational Excellence in the Public Sector and then integrate them in a comprehensive, reliable and valid performance measurement system.

The focus for this study was the Portuguese Local Government. By the diversity of services it provides and multiplicity of goals it pursues, the Local Government is a good example of the particularities and complexities involved in the measurement of Organisational Excellence in the Public Sector. The Portuguese case is, in our view, rather representative since it reflects many of the tendencies observed in other countries, combining the adoption of new management elements with a strong public sector culture.

- Methodological standpoint

This research essentially adopts a systems perspective (Fuenmayor, 1991; Jackson 1991), in which municipalities, as organisations, are conceived as "network(s) of interdependent components that work together to try to accomplish the aim of a system" (Deming, 1986). Accordingly, they are made up of elements – people, materials, and processes – that interact with each other to pursue an overall and collective purpose. To some extent, this necessarily implies the transformation of inputs into outputs.

Thus, the key problem that underlies the whole research concerns the measurement of inputs, processes, outputs and outcomes, especially when, as in the Local Government's

case, they are so diverse, the overall aim of the system so difficult to establish and the system boundaries so diffuse.

Together, this means that we cannot assume a purely positivist and functionalist standpoint (Jackson, 1991) when analysing the drivers of Organisational Excellence in the Portuguese municipalities. The absence of uniformity and the impossibility of relying on regularity call for a departure from hard deterministic views and the recognition of conflict, subjectivity and unpredictability.

We believe, like TQM researchers usually advocate, that it is possible to reach a certain level of consensus regarding the system purpose and values, but we also acknowledge that organisational success does not mean the same thing for the different parts involved.

Consequently, elements from a more "soft systems approach" (Fuenmayor, 1991; Jackson, 1991) were incorporated in this research by considering the perceptions of different stakeholders when assessing the municipalities' performance. We are thus aware of the importance of mental processes and interpretations of reality in shaping the system behaviour.

It can hence be said that, while this research is closer to a rational instrumental approach, emphasising planning, integration and alignment, it does not deny the contribution of the institutional theory (Brignall and Modell, 2000), in that it draws attention to the existence of multiple constituencies, the complex game of power they play, and the intensely political nature of decision-making in public organisations.

In synthesis, one can conclude that our research is in line what Habermas described as the principles of critical systems (Jackson, 1991). It follows the usual rules of scientific discourse, proposing and testing mathematical hypothesis, while, at the same time, acknowledging that theories have to be formulated to cope with aspects of social reality such as conflict, contradiction, power, coercion and change. Consequently, we involved different social actors in the validation of the theories proposed.

Accordingly, a system modelling approach (Daellenbach, 1994) was adopted, in which the Local Government was described in terms of components, subsystems, transformation processes, inputs and outputs, and analytical models, involving the potential key drivers of Organisational Excellence, were developed, tested and validated.

- Research approach

In view of our methodological standpoint, research purpose and questions, a research plan, encompassing two major stages – model building and model application –, was established (see Figure 10.1).

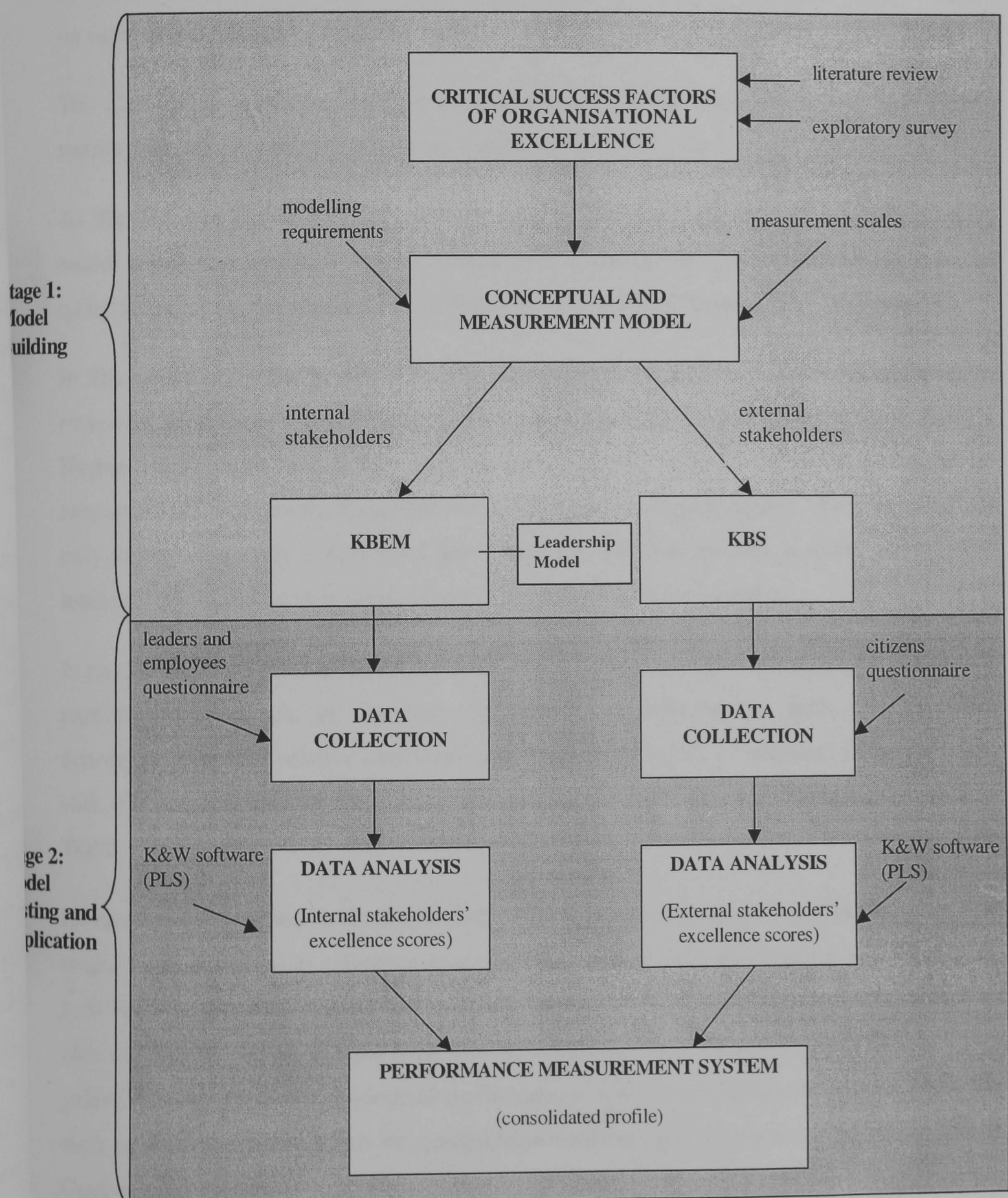


Figure 10.1. Research approach synthesis

According to the plan above, first, it was necessary to define the dimensions against which the Excellence of the Portuguese municipalities was going to be assessed.

A critical success factors approach was employed since it is highly consistent with the analysis of cause-effect relationships, as required by most of our research questions. Moreover, it has the advantage of pointing out those key aspects that have a major impact on superior performance, contributing to model parsimony and simplicity.

The CSFs were identified and pre-validated based on the literature review and on the results from the exploratory survey we conducted in the Portuguese municipalities.

As illustrated in Figure 10.1, the next step was to develop a conceptual and measurement model where those critical aspects would correspond to the criteria used to evaluate, in quantitative terms, the Organisational Excellence of the Portuguese Local Government.

In this regard, existing Business Excellence models and other relevant frameworks were reviewed, according to a set of modelling requirements. Based on this assessment, Kanji's Business Excellence Model (KBEM) was selected as the basis for the development of the new system to measure the Excellence of the Portuguese municipalities. We concluded not only that it adequately covers the CSFs identified, but also provides a sound and reliable methodology based on structural equation modelling (SEM) principles.

In fact, it was thought that the use of a structural model was the most appropriate, since it permits the analysis of various relationships simultaneously and thus assesses interdependently the relative contribution of each CSF to OE. In addition, SEM is in line with our conception of a municipality as a complex system and with the holistic nature of TQM.

However, to be applied in the Local Government, some adjustments in KBEM had to be made. First, the explicit reference to citizens in some model dimensions was necessary, both because the word "customer" raises some confusion and resistance and because the idea of "citizen" is more embracing and in accordance with some distinct public sector values. Besides these terminological modifications, the scales (indicators) used to measure each model construct had to be completely reviewed and customised to fit the Local Government context.

This was complemented with a stakeholders approach in that the various actors who have an interest in the Local Government were identified. In our case, leaders, local government officials and citizens were considered to be the most important stakeholders of a municipality. Support for adopting this approach is very wide, especially when multiple and potentially conflicting aims are at stake.

So that their views could be incorporated in the measurement of Organisational Excellence, slightly different versions of the basic model were then developed. The internal stakeholders' framework follows a structure that is very close to the original KBEM, whereas to take into account external stakeholders' views a Scorecard (KBS) was created.

It is important to notice that both frameworks are grounded in identical critical success factors and use the same methodology, but have distinct levels of detail, each of them concentrating on those issues that are more relevant to the respective stakeholders' group.

Given its crucial importance as the foundation of Organisational Excellence in the Local Government, the Leadership component was carefully analysed. Within the Scorecard, citizens were asked to assess the leaders' role in several aspects. Within KBEM, the leadership construct was expanded and a new structural model developed to measure it in some detail.

To initiate the model testing and application stage, questionnaires were designed to gather the views from leaders, employees and citizens on the various model dimensions.

Once checked the reliability and validity properties of the constructs and associated scales, KBEM and KBS were used to actually assess, according, respectively, to internal and external stakeholders' perspectives, the level of implementation of each critical success factor and to determine the resulting organisational excellence index for the participant municipalities. Similarly, based on leaders' and employees' feedback, the leadership model was estimated.

K&W software was employed to obtain the model estimations and to perform the necessary calculations. The chosen software deals effectively with structural equation models and has the main advantage of using partial least squares estimators, which are appropriate to handle small samples and do not require assumptions of normality.

Finally, KBEM and KBS were combined to form the integrated Performance Measurement System. By confronting and aggregating internal and external views, a consolidated profile of the Portuguese municipalities emerged.

- Samples and participants

The theories proposed in this research were formulated based on an extensive literature review and empirically tested and validated with data collected from the Portuguese municipalities using self-administered questionnaires, which, in spite of their limitations (see Chapter 5) were considered economical and suitable to achieve a good level of comparability and generalisation.

The questionnaires were specifically designed for this research and sent to all the 308 Portuguese municipalities. For the municipalities' scorecard, data was collected from a sample of citizens.

Table 10.1 summarises the data collection stages, purposes and basic characteristics of the samples involved.

Stages	Purposes	Samples
A) Exploratory study: May/September 2000	Describe the state of TQM implementation in the Portuguese municipalities; Analyse the main motivations and barriers for TQM adoption; Preliminary validation of the Critical Success Factors (CSFs)	90 municipalities (mainly political leaders and senior local government officers respondents)
B) Measurement of Leadership – May/September 2001	Test and validate the Leadership Excellence model; Calculate the scores for the various CSFs and final Leadership Excellence Index for the Portuguese municipalities; Make some comparisons between leaders and employees assessments	85 municipalities (respondents: political leaders and managers plus 70 employees from 3 municipalities in particular)
C) KBEM application – May/September 2001	Test and validate the Organisational Excellence model; Calculate the scores for the various CSFs and resulting internal Organisational Excellence index for the Portuguese municipalities	85 municipalities (respondents: political leaders and managers plus 70 employees from 3 municipalities in particular)
D) KBS application – May and August 2001	Test and validate the business scorecard model; Calculate the scores for the various CSFs and resulting external Organisational Excellence index for the Portuguese Municipalities	300 citizens (an aggregated sample of 130 citizens representing 56 municipalities plus an extra sample of 170 citizens from 3 municipalities in particular)

Table 10.1. Data Collection Summary

10.2. MAJOR RESEARCH FINDINGS

- TQM implementation in the Portuguese municipalities

In support of the importance of performance measurement and Quality Management for enhancing accountability and delivering better and more effective services, the Portuguese Government have been launching several initiatives to encourage their implementation (Chapter 1).

The results from our exploratory study (Chapter 4) reveal that TQM is in fact generating considerable interest among Local Government organisations, with around 40% of the Portuguese municipalities already implementing Quality Management in any form and the majority of the remaining 60% having plans to introduce it in the near future. However, the inexistence, in many cases, of a proper plan and the lack of education and training in quality concepts, methodologies and tools also indicate the introductory character of many of those TQM efforts.

Customer awareness and citizen satisfaction were pointed out as the major reasons for TQM implementation, followed by increasing staff motivation and improving economy, efficiency and effectiveness.

Therefore, TQM is expected to contribute to the traditional 3Es performance goals (Chapter 9), but its implementation is also regarded as a means to fight the negative consequences of bureaucracy and to enhance transparency, citizenship and democracy.

The critical importance of leadership in initiating and driving TQM implementation was stressed, with the vast majority of the respondents indicating that political leaders with the support of heads of departments were responsible for introducing TQM.

Findings from the exploratory study also provided initial support for the supposition that the implementation of Total Quality Management principles and core concepts can, at least in part, lead to superior Organisational Excellence in the Portuguese municipalities.

- Critical Success Factors

The CSFs proposed in our study were identified based on the literature review (Chapter 2). It was found that KBEM adequately covered the dimensions suggested by major researchers and embedded in well-known business excellence models, including the limited frameworks specifically developed in the Public Sector context (Chapter 3).

The CSFs that made up KBEM (Chapter 2) were in the exploratory study (Chapter 4) subject to a preliminary test and subsequently validated by analysing a series of hypothesis relating them to a final and aggregated measure of Organisational Excellence (Chapter 6). According to data collected from the Portuguese municipalities, the large majority of the paths linking them to OE were found to be positive and statistically significant. Therefore, data supports that OE in the Portuguese municipalities depends on:

- Leadership
- Citizen/Customer Delight
- External Citizen/Customer Satisfaction
- People Based Management
- People Make Quality
- Continuous Improvement
- Prevention

On the other hand, there was not enough evidence to validate the hypothesis relating *all work is process* and *measurement* to *organisational excellence*. Similarly, despite the positive structural coefficients, it was not possible to demonstrate statistically the links between *internal customer satisfaction* and *organisational excellence*, *teamwork* and *organisational excellence*, and *continuous improvement cycle* and *organisational excellence*.

- Leadership Excellence

Both the criticality assigned to Leadership in the exploratory study and the strength of the structural coefficients linking this aspect to the other dimensions included in the Organisational Excellence models corroborate its importance as the prime determinant of success in the Portuguese municipalities.

Therefore, we felt it was appropriated to analyse the Leadership construct in greater detail, specifying and measuring the main roles associated with it. From an extensive review of the literature (Chapter 7) we suggested that, in order to support Organisational Excellence, leaders would essentially be responsible for:

- Developing, practising and implementing the Organisational Values;
- Creating and communicating a compelling Vision;
- Establishing the Mission and making everyone aware of how they can contribute towards its accomplishment;
- Designing and reviewing the Strategy;
- Managing a set of Key Issues that primarily include: aligning the organisational structure with the overall goals, conceiving an appropriate system of rewards and incentives, and empowering the staff.

In the Portuguese municipalities (see section 7.5.1), leaders are fundamentally politicians who are quite good at defining the *Mission* (71 points), formulating a *Vision* (69 points) and reasonable at conceiving a Strategy (66 points), but who lack important managerial skills. Overall, they obtain a good *Leadership Excellence Index* (70 points), though weaknesses in the *Key Issues* (64 points) clearly jeopardise leaders credibility and capacity to deliver what they promise. In particular, they are often unwilling to shift part of the power they have to lower levels in the hierarchy and unable to align the organisational structure with the aims they intend to pursue.

These problems became apparent when we confronted the leaders self-assessment with staff views on the matter. Although this was done only on a small scale, and therefore generalisations are dangerous, it is possible to conclude that leaders' perceptions are, at a certain extent, inflated. The gap is partially explained by communication problems and the feeling employees have that they are not being sufficiently empowered or their skills fully utilised.

The importance of conveying a consistent image by *walking the talk* and putting in place adequate reinforcement systems emerged as key aspects of the leadership improvement strategy.

On the whole, data widely supported the proposed model and the hypothesised relationships.

- Internal Assessment of Organisational Excellence

KBEM was used to measure Organisational Excellence from the internal stakeholders' point of view (Chapter 6).

Findings show that the theoretical justifications for the causal relationships embedded in the model have support in the data. The majority of the paths were found to be positive and statistically significant.

The final Organisational Excellence Index for the 85 municipalities that participated in the study is 74 points. Taking into consideration that the majority of them also took part in the exploratory study (see Table 6.2), this index is in line with the initial (and positive) beliefs of the municipalities regarding their organisational performance (see Table 4.21). Still, we must notice that this is just an internal evaluation and needs to be complemented with the external assessment made by Local Government citizens.

Furthermore, the municipalities are not implementing at the same extent the various CSFs. The principles of *Citizen/Customer Delight* (71 points) and *Continuous Improvement* (67 points) are main strengths. On the other hand, the lack of *Management by Fact* (59 points) reveals that the municipalities rely too much on intuition and assume they are *doing the right things right* without properly managing the processes (59 points) and measuring the inputs, outputs and outcomes of their activities (48 points).

The small-scale study conducted in three municipalities, where data was also collected from the employees, drew attention to deficiencies in the way *People-based Management* is being practised. According to staff views, lack of empowerment and insufficient education and training show that the *People Make Quality* concept is not yet assimilated, while the inexistence of a collaborative environment and the tendency to punish rules breakages and mistakes jeopardises teamwork and innovation.

Two main lessons for the Portuguese municipalities can be extracted from the internal measurement of Organisational Excellence. First, the need to manage the key processes and to collect, analyse and disseminate reliable and meaningful measurements, and, second, the importance of extending the assessment exercise to all internal stakeholders so that a more comprehensive and realistic picture can emerge.

- External Assessment of Organisational Excellence

For the measurement of Organisational Excellence from the external stakeholders' perspective a Scorecard was developed (Chapter 8). It integrates the CSFs identified and uses the same methodology as KBEM, but concentrates on those areas that are particular relevant for the citizens of a municipality.

The final Business Scorecard Index for the Portuguese municipalities is 43 points, showing that improvements are necessary in the way Local Government organisations interact with the customers they serve and the citizens they represent. In spite of differences among the municipalities (as the small-scale study illustrates), problems in communicating what the organisation stands for and informing citizens on the outcomes of the activities consistently emerged as main weaknesses. Furthermore, leaders are perceived as approachable only at election times.

Citizens and customers requirements need to be continuously analysed and their levels of satisfaction periodically measured. Only then *Stakeholders Delight* (40 points) will increase. Citizens and customers feedback is also essential to enhance *Organisational Learning* (41 points).

The importance of the *Organisational Values* (39 points) was emphasised by their high associations with all the scorecard dimensions. Creating a sense of community surrounding the values and implementing policies and strategies consistent with them are key to improve at the citizens' eyes.

Additionally, the results pointed out the importance of making citizens participate on Local Government on a regular basis. It is concluded that the application of TQM principles can indeed foster citizens' involvement and contribute to improve the municipalities' performance.

- Final Performance Excellence Index

Internal and external measurements were combined to form the integrated Performance Measurement System (Chapter 9).

The resulting Performance Excellence Index for the Portuguese municipalities is 590 points (out of a possible 1000 points).

The main finding is the existence of a considerable gap between internal (74.4 points) and external (43.6) assessments. This clearly shows that leaders' perceptions can be misleading and are not enough to get a realistic picture of OE. Measuring performance from a multiple stakeholders' perspective is absolutely essential.

Major discrepancies need to be addressed as a matter of priority. This inevitably calls for an outward-focus, the creation of new communication channels between municipalities and local communities, the development of partnerships and the introduction of a more open and democratic leadership style.

It is argued that the New Performance Measurement System, by forcing the municipalities to collect feedback from all the stakeholders and by concentrating on the critical success factors, can support the Local Government's quest for Excellence.

- <u>Overall evaluation of the structural models developed and applied in this research</u>

Results broadly confirm the structure of the models proposed and demonstrate that a close relationship exists between the application of TQM principles and concepts and Organisational Excellence

Some general comments can be made to the models employed in this research:

- Taken as a whole they make sense on theoretical grounds and provide plausible accounts for the data;
- After some minimal modifications, the scales used to represent each model construct comply with requirements of validity and reliability;
- Relative high R^2, for each construct and for the entire models, were obtained. Even in the cases where R^2 values are relatively small, all the relationships (with the exception of two links which do not significantly differ from zero) are positive, as predicted;
- The large majority of the path coefficients were statistically significant. In the limited number of circumstances where that was not the case, the proposed relationships still make sense from the theoretical point of view, but characteristics of the sample and/or the possible absence from the model of other influential variables explain why some links were not established;

- All the constructs have positive correlations with organisational excellence, thus suggesting criterion-related (predictive) validity;
- Positive and moderate to strong correlations among the vast majority of the constructs suggest that there is a high degree of interdependence among the determinants of organisational excellence and corroborate the holistic nature of TQM.

Overall, the various models developed in this research exhibit the characteristics of "good mathematical models" (Daellanbach, 1994), since they are:

- Simple (avoiding unnecessary complexity);
- Complete (including the most significant aspects of the problem);
- Easy to manipulate (calculations are not difficult to perform and results are relatively easy to interpret);
- Robust (some changes and adjustments can be made without invalidating the model);
- Interactive and user-friendly; and
- Useful (producing relevant and timely outputs which effectively support decision making).

10.3. RESEARCH CONTRIBUTIONS AND IMPLICATIONS

In spite of evident commonalities between some reforms introduced in the Public Sector and the principles underlying Total Quality Management, the fields of TQM and Public Administration have been largely developed independently from each other (Sharitzer and Korunka, 2000). To address in part this gap, this research pays particular attention to the public administration language and interprets each of the quality constructs in the context of the Public Sector, looking at its different values, managerial particularities and constraints.

Both Quality Management and recent Public Management movements emphasise the importance of responsiveness to customer demands, performance measurement, and efficiency. However, Quality Management explicitly calls for increased employee participation and customer involvement throughout the processes of planning, delivering

and assessing the services provided. Therefore, in our view, Quality Management has the potential to go a step further in what concerns Public Sector democratic governance.

In our opinion, this study provides new insights into how Quality Management principles and core concepts can be used to bring Local Government and citizens closer and. thus, ultimately, to improve the quality of local democracy.

Despite the growing interest in Quality Management and performance measurement in the Public Sector, a review of relevant literature revealed that there is no generally accepted model of Organisational Excellence. In particular, in the context of Local Government there are virtually no management models with a sound theoretical support and which are empirically validated. The models put forth in this research contribute, in our view, to fill this gap.

With reference to the Portuguese municipalities, this was the first attempt to measure the impact of different TQM elements on OE. The results of this study can guide recent efforts aimed at raising Quality awareness, by stressing the importance of following a holistic approach focused on the critical success factors and by drawing attention to the expected benefits of a successful TQM implementation.

In this research structural models were developed, which integrate and relate the key determinants of Organisational Excellence. These models provide a holistic view of the municipalities, thus avoiding what Jackson (1991) calls the "reductionism" inherent in the more traditional perspective of "breaking wholes down into their fundamental elements".

By integrating KBEM and KBS, Organisational Excellence is simultaneously measured according to internal and external views. Because the proposed frameworks capture the views of multiple stakeholders, they form a new system that, we believe, can constitute the basis to conceive reasonable and consistent strategies to improve Local Government performance.

10.4. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

In several aspects, this was a pioneering research and therefore findings and extrapolations must be regarded with some care.

A first limitation comes from the sample sizes used in this research. It is known that sample size strongly influences the quality of estimations. Although minimal requirements were met, it is thought that increasing the number of observations would improve the robustness of some parameters and inclusively lead to the validation of some hypothesis that could not be statistically supported in this study.

It may also be argued that the questionnaires employed are very generic and therefore do not address the particularities of each municipality. Nevertheless, one of the aims of this research was to achieve a considerable level of generalisation and get a profile of problems and improvement strategies that are valid to the Portuguese municipalities as a whole. Additionally, general measures have the advantage of allowing comparisons with other organisations and contexts.

Empirical results provided positive indications of the validity of the Organisational Excellence models proposed. However, as Jonge *et al.* (2001) emphasise, demonstrating causal relationships – although useful from a theoretical, practical and methodological perspective – is extremely difficult. It requires a plausible association between two variables, evidence about the direction of causality and the possibility of excluding other alternative explanations (Jonge *et al.*, 2001).

The fact is that, by definition, a model is a simplified representation of the reality and, consequently, never considers all the potential influential variables. Moreover, in this particularly case, data on the potential causes and effects were collected at a single moment. Therefore, causality links cannot be irrefutably established based uniquely on this study.

Goodness-of-fit measures support the idea that the major drivers of Organisational Excellence were explicitly addressed, but obviously there is a diverse array of forces that this research omits and that could be considered in future studies as an attempt to improve the magnitude of some path coefficients and increase the associated R-squares. In this regard, it would be possible to slightly modify the models to accommodate new CSFs or add a small number of manifest variables to the questionnaires.

Additionally, it would be important to develop a measure of OE completely independent from any of the TQM dimensions. A few studies have suggested some kind of financial

measure as a surrogate of OE (Barker, 2000), but besides usually being rough estimates, they would not be appropriate to the Local Government, given the variety of purposes it pursues and the complex net of stakeholders it embraces. To focus exclusively on indications such as re-election or even the improvement in a league table position (which in any case do not exist in Portugal) would always represent rudimentary simplifications and, what is worse, might put a strong emphasis on short-run goals at the expense of long-term purposes.

Above all, a longitudinal design would allow the measurement of causes and effects on several points in time, thus contributing to investigate the real impact on Organisational Excellence (the effect) of improvement strategies based on changes on the CSFs (the system drivers or causes). Only then the link between the adoption of TQM practices and performance could be more definitely established.

Also, this research was focused on the Portuguese municipalities. All the coefficients and measures were calculated based on data collected in this particular context. In spite of our belief that the case of Local Government in Portugal provides useful insights into other realities, similar studies would have to be conducted in different settings - other countries and/or other parts of the Public Sector - to permit prudent generalisations.

The present research could also be extended in several ways. It would be possible, for example, to consider other Local Government organisations such as associations of municipalities and parishes. Furthermore, the measurement of the municipalities' performance from an external perspective relied exclusively on the citizens' assessment. In the future, it would be recommended to develop similar scorecards to other stakeholders, such as local firms and businesses, Central Government, suppliers and financial institutions.

A final suggestion to further studies is, similar to what we did for the Leadership construct, to look in detail into other model dimensions. The development of specific (sub)models to analyse in-depth each construct could contribute to a better understanding of the different drivers of Organisational Excellence.

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APPENDIX A

SURVEY ON QUALITY MANAGEMENT IN A MUNICIPALITY

INQUÉRITO PARA A GESTÃO DA QUALIDADE NUM MUNICÍPIO

SURVEY ON QUALITY MANAGEMENT IN A MUNICIPALITY

Este questionário faz parte de um projecto de doutoramento, visando a elaboração de um modelo para medir a excelência no governo local.
Em particular, os objectivos deste inquérito são:

- conhecer a situação das iniciativas levadas a cabo pela sua instituição no âmbito da Gestão da Qualidade;
- identificar as abordagens seguidas e as ferramentas utilizadas na aplicação dos princípios da Qualidade na instituição;
- compreender as barreiras e dificuldades encontradas na implementação da Gestão da Qualidade.

A Secção A engloba um conjunto de 40 questões. Conforme o apropriado:

— assinale com um √ o(s) quadrado(s) respeitante(s) à sua escolha;
— escreva as suas respostas nas linhas indicadas;
— preencha as caixas com informação relevante.

Na Secção B são pedidas algumas informações relativas à sua instituição. Estes dados destinam-se somente a tratamento estatístico e serão conservados confidenciais.

Com o objectivo de esclarecer o significado de alguns termos que eventualmente lhe não sejam inteiramente familiares, poderá encontrar um pequeno glossário no final deste questionário.

Pelas circunstâncias em que este trabalho se insere, o questionário foi elaborado em português e inglês.

This questionnaire is part of a PhD research project aiming to develop a model for measuring organisational excellence in the local government.
In particular, the objectives of this survey are:

- to assess the state of quality initiatives carried out by your institution;
- to identify the approaches and tools used in applying quality principles to your institution;
- to get an insight on the main barriers and difficulties faced when implementing quality initiatives.

Section A comprises 40 questions. Wherever appropriate:

- tick the relevant boxes;
- write your responses on the lines;
- fill in the boxes with relevant information.

Section B asks you to give some data concerning your institution. This information will be used for statistical purposes only and will be kept confidential.

To help you deal with any terms you may not be familiar with there is a glossary at the end of the survey.

SECÇÃO A: QUALIDADE EM CURSO

SECTION A: QUALITY IN PROGRESS

1. **De entre as definições seguintes, escolha aquelas que melhor se ajustam ao significado que Qualidade tem no seu Municipio**
   From the following definitions choose the one(s) that better reflect the understanding of the quality concept within in your municipality.

   - ☐ Adequação ao uso
     Fitness for use
   - ☐ Adequação à estratégia definida
     Fitness for strategic purpose
   - ☐ Resposta às expectativas dos munícipes
     Meeting citizen's expectations
   - ☐ Conformidade com os requisitos
     Conformance to requirements
   - ☐ Outra. Por favor especifique
     Other. Please specify
     _____

2. **A sua instituição adopta na prática abordagens/procedimentos para a melhoria da Qualidade dos processos e actividades desenvolvidas?**
   Are there in place any kind of procedures for improving the quality of processes (Quality Management) in your institution?

   - ☐ Sim — Por favor, prossiga para a questão seguinte
     Yes — Please go to next question
   - ☐ Não — Se a sua resposta é NÃO, por favor, prossiga para a questão n.º 32
     No — If NO, please skip to question n. 32

3. **Quando é que foram introduzidas as primeiras iniciativas para a Gestão da Qualidade? (Ano)**
   When were the first Quality Management initiatives introduced? (Year) ☐

4. **Que tipo(s) de abordagem tem sido seguido? (Assinale todos as que se aplicam)**
   What kinds of formalised approaches have been followed? (Tick all that that apply)

   - ☐ Certificação ISO 9000
     ISO9000 Certification
   - ☐ Gestão pela Qualidade Total
     Total Quality Management
   - ☐ Sistema Português da Qualidade para os Serviços Públicos (SQSP)
     Portuguese Quality System for Public Services
   - ☐ Carta da Qualidade
     Quality Charter
   - ☐ Outra. Por favor especifique:
     Other. Please specify: _____
   - ☐ Nenhuma
     None

5. **Qual é o âmbito da implementação da Gestão da Qualidade na sua instituição em termos de cobertura?**
What is the magnitude of Quality Management implementation in terms of organisational coverage?

- [ ] Toda a instituição
Institution-wide
- [ ] Alguns departamentos ou divisões
Some departments/divisions
- [ ] Alguns grupos de trabalho
Some work units
- [ ] Alguns projectos em particular
Some particular projects
- [ ] Outro. Por favor especifique:
Other. Please specify: _____

6. **Qual foi o elemento ou organização-chave na introdução e promoção da Gestão da Qualidade? (Assinale todos os que se aplicam)**
Who is the key person or organisation involved in the introduction and promotion of Quality Management? (Tick all that apply)

- [ ] Presidente da Câmara
Mayor
- [ ] Exectutivo Camarário / Vereador
Executive body
- [ ] Assembleia Municipal
Municipal assembly
- [ ] Director de Serviços/Chefe de Divisão. Por favor especifique:
Department/Division director. Please specify: _____
- [ ] Director da Qualidade
Quality director
- [ ] Funcionário da instituição. Por favor indique a sua função e departamento:
Other staff member. Please state from which department _____
- [ ] Munícipes/Utentes
Citizens/Customers
- [ ] Outro. Por favor especifique: _____
Other. Please specify:

7. **Quem tomou a decisão de adoptar iniciativas no âmbito da Gestão da Qualidade? (Assinale todas as alternativas que se aplicam)**
Who made the decision to adopt Quality Management? (Tick all that apply)

- [ ] Presidente da Câmara
Mayor
- [ ] Exectutivo Camarário / Vereador
Executive body
- [ ] Assembleia Municipal
Municipal assembly
- [ ] Director de Serviços/Chefe de Divisão. Por favor especifique:
Department/Division director. Please specify: _____
- [ ] Director da Qualidade
Quality director
- [ ] Funcionário da instituição. Por favor indique a sua função e departamento:
Other staff member. Please state from which department _____
- [ ] Munícipes/Utentes
Citizens/Customers
- [ ] Outro. Por favor especifique:
Other. Please specify: _____

8. **Enuncie um máximo de cinco razões para implementar a Gestão da Qualidade e estabeleça a sua importância. Atribua 1 ao motivo mais forte, 2 ao seguinte e assim sucessivamente.**
State no more than five main reasons for implementing Quality Management and then rank them in terms of their strength. Assign 1 to the most strongest reason, 2 to the next, 3 to the following, etc.

		Posição *Rank*
Razão 1: *Reason 1:*		
Razão 2: *Reason 2:*		
Razão 3: *Reason 3:*		
Razão 4: *Reason 4:*		
Razão 5: *Reason 5:*		

9. **Qual é a estrutura organizativa interna em que se apoiam os programas de Qualidade? (Assinale todas as que se aplicam)**
What is the institution's organisational structure for Quality? (Tick all that apply)

- ☐ Departamento de *Department* _____
- ☐ Divisão de *Division* _____
- ☐ Secção de *Unit* _____
- ☐ Equipas interfuncionais *Teams*
- ☐ Outra. Por favor especifique: *Other. Please specify:* _____

10. **A que áreas se aplica a Gestão da Qualidade na sua instituição? (Assinale todas as que se aplicam)**
Where is Quality Management applied in your institution? (Tick all that apply)

- ☐ Processos de tomada de decisão *Decision making*
- ☐ Serviços administrativos *In administrative areas*
- ☐ Serviços técnicos *In technical areas*
- ☐ Transportes públicos *Public transportation*
- ☐ Águas e saneamento *Water and sanitary services*
- ☐ Licenciamentos *Licences concession*
- ☐ Atendimento ao municipe *Interaction with citizens*
- ☐ Serviços de Pessoal *Personnel department*
- ☐ Serviços Sociais *Social Services*
- ☐ Educação, Cultura e Desporto *Education, Culture and Sport*
- ☐ Outra. Por favor especifique: *Other. Please specify:* _____

11. **Alguns factores são particularmente criticos para o bom funcionamento de uma Câmara Municipal. Por favor, classifique-os de acordo com a importância que cada um deles representa na sua instituição (atribua 1 ao factor mais forte, 2 ao seguinte e assim sucessivamente).**
Some organisational management factors are critical for the success of a City Council. Please rank the following factors in terms of criticality in your institution. Assign 1 to the most critical, 2 to the next, 3 to the following, etc.

	Posição *Rank*
Liderança *Leadership*	
Melhoria contínua *Continuous improvement*	
Aposta na prevenção *Prevention*	
Avaliação e Gestão dos Recursos *Measurement of resources*	
Melhoria dos Processos *Process improvement*	
Satisfação dos Clientes Internos (Colaboradores) *Internal customer satisfaction*	
Satisfação dos Clientes Externos *External customer satisfaction*	
Gestão das Pessoas *People management*	
Trabalho em Equipa *Teamwork*	
Gestão baseada em dados e factos *Management by fact*	
Envolvimento e relacionamento com fornecedores *Suppliers involvement*	
Outro. Por favor especifique: *Other. Please specify:* _____	

12. A importância relativa destes factores muda ao longo do tempo?
Do this ranking of critical factors change over time?

☐ Sim *Yes* ☐ Não *No*

13. A importância que atribuiu aos factores referidos na questão 12 traduz: (Assinale todas as alternativas que se aplicam)
The ranking you assigned to the factors in question n.º 12 reflects: (Tick all that apply)

☐ As orientações governamentais
Government's policy
☐ A política da sua instituição
Institution's policy
☐ A política do departamento/comissão de Qualidade
Institution's Quality department/committee's policy
☐ As suas preferências pessoais
Personal preferences
☐ Outro determinante. Qual?
Other. Please specify: _____

14. Qual a proporção de funcionários que compreende os conceitos de cliente interno e cliente externo?
What proportion of employees understand the concept of internal and external customer?

- ☐ Menos de 5% *Less than 5%*
- ☐ Menos de 25% *Less than 25%*
- ☐ Cerca de 25% *About 25%*
- ☐ Entre 25 e 50% *Between 25 and 50%*
- ☐ Cerca de 50% *About 50%*
- ☐ Entre 50 e 75% *Between 50 and 75%*
- ☐ Mais de 75% *More than 75%*
- ☐ Todos *Everybody*

15. Quais dos seguintes elementos, pela forma como desempenham o seu trabalho, controlam a qualidade dos processos da sua instituição? (Assinale todos os que se aplicam)
Do you think the following people control the quality of processes in the organisation by the way they perform their work? (Tick all that apply)

- ☐ Presidente da Câmara *Mayor*
- ☐ Executivo Camarário/Vereadores *Executive body*
- ☐ Directores de Serviços/Chefes de Divisão *Department Heads*
- ☐ Outro. Por favor especifique: *Other. Please specify:* _____
- ☐ Director da Qualidade *Quality Director*
- ☐ Pessoal técnico *Technical staff*
- ☐ Pessoal administrativo *Administrative staff*

16. Quais as barreiras encontradas na implementação da Qualidade Total? Assinale, por favor, na coluna da esquerda todas as que foram sentidas. Em seguida, escolha um máximo de cinco que julga serem as mais significativas e classifique-as na coluna da direita. Atribua 1 à maior dificuldade, 2 à seguinte e assim sucessivamente.
What barriers are faced in implementing Quality Management? (Fill any that apply in the column of the left) Then, in the column of the right, rank not more than five main barriers affecting the institution's Quality Management in terms of their difficulty. Assign 1 to the most difficult barrier, 2 to the next, 3 to the following, etc.

		Posição *Rank*
	O pessoal estava sobrecarregado com o trabalho do dia a dia *Staff were pressed with daily work*	
	Resistência à mudança *Resistance to change*	
	Falta de conhecimentos e competências *Insufficient Knowledge or skill*	
	Dificuldade em traduzir para o contexto da instituição alguns dos conceitos utilizados (ex. cliente, fornecedor, produto, processo) *Problems in translating to the institution's context some concepts (such as customer, supplier, product, process)*	
	Orçamento insuficiente *Insufficient budget*	
	Sensação de que se tratava de um esforço de curto prazo, condenado no futuro *The approach is believed to be short-lived gimmick or fad*	
	Falta de empenho *Lack of commitment*	
	Instabilidade derivada da natureza política e eleitoral da instituição *Instability due to the political and electoral nature of the institution*	
	Falta de liderança e empenho por parte do executive camarário	

	Insufficient commitment from the leadership and executive board	
	Descrença na eficácia da abordagem *Disbelief in its effectiveness*	
	Descrença na sua aplicabilidade ao poder autárquico *Disbelief in its applicability to the local government*	
	Fraca motivação devido à falta de resultados imediatos *Poor motivation due to the lack of immediate results*	
	Falta de conhecimentos na área da Qualidade *Lack of knowledge about quality approaches and tools*	
	Receio do insucesso *Fear of failure*	
	Receio de perder poder *Fear of loosing power*	
	Resistência em utilizar um modelo de gestão que confere aos cidadãos um papel mais interventivo na vida do município *Resistance for using a business model which provides the citizens with a more active role in the City Council's life.*	
	Resistência das chefias intermédias *The barrier of middle management*	
	Outra. Por favor especifique: *Other. Please specify.* _____	

17. A instituição dispõe das competências necessárias para a melhoria da qualidade dos seus processos?
Does the organisation have the expertise in managing quality improvement processes?

- [ ] Dispõe de um elevado nível de competências
  The institution has high level of expertise
- [ ] Dispõe da maioria das competências necessárias
  The institution has somewhat reasonable expertise
- [ ] Dispõe das competências mínimas
  The institution has moderate expertise
- [ ] Faltam algumas competências fundamentais
  The institution has somewhat inadequate expertise
- [ ] Não dispõe de quaisquer competências
  The institution has no expertise at all

18. São definidos planos de formação?
Are there education/training plans in place?

- [ ] Sim *Yes*
- [ ] Não *No*

19. Em termos de abrangência como classifica, as oportunidades de formação proporcionadas pela instituição? (Assinale as situações que se aplicam)
What is the magnitude of the education and training opportunities provided by the institution in terms of organisational coverage? Tick any that apply.

- [ ] Só para os dirigentes
  Only directors have access
- [ ] Só para os quadros superiores
  Only senior staff has access
- [ ] Todos os membros da instituição
  All members of the institution
- [ ] Só para os Eleitos locais
  Only political leaders have access
- [ ] Só nalgumas áreas
  Only in some areas
- [ ] Em todas as áreas
  In all areas

20. Como avalia a formação dada aos membros da instituição para levar a cabo as iniciativas no âmbito da Qualidade?
Is there sufficient Quality education/training given to organisational members to prepare for the quality initiatives taken in the institution?

- ☐ Perfeitamente suficiente
  Sufficient
- ☐ Bastante razoável
  Somewhat sufficient
- ☐ Aceitável
  Moderate
- ☐ Insuficiente
  Insufficient
- ☐ Inexistente
  No education at all

21. Quais são as formas de motivação disponíveis para distinguir as pessoas que contribuem para a melhoria da Qualidade? (Assinale todas as que se aplicam)
What forms of motivation are available for people in the organisation for contributing towards a quality cause?

- ☐ Promoções na carreira
  Job promotion
- ☐ Prémios financeiros
  Financial bonus
- ☐ Rotação de tarefas
  Job rotation
- ☐ Reconhecimento
  Word of praise
- ☐ Privilégios especiais
  Special privilege
- ☐ Outra. Por favor especifique:
  Other. Please specify:

_____

22. A instituição recorre a consultores externos para implementar programas de Qualidade?
Does the institution seek the service of outside consultants to implement Quality Management?

- ☐ Sempre
  Always
- ☐ Frequentemente
  Often
- ☐ Ocasionalmente
  Occasionally
- ☐ Raramente
  Hardly
- ☐ Nunca
  Never

23. Considera que a instuição tem uma Cultura de Qualidade?
Do you think the organisation has a Quality Culture?

- ☐ Sim, sem dúvida nenhuma
  Absolutely
- ☐ Sim, genericamente é verdade
  Somewhat positive
- ☐ De certa forma
  Fair
- ☐ Não, raramente se sente
  Hardly
- ☐ Não, de todo
  Not at all

24. A Cultura de Qualidade da sua organização tem evoluido favoravelmente nos últimos anos?
Do you think the Quality Culture of your organisation has changed positively in recent years?

- ☐ Sim
  Yes
- ☐ Não
  No

25. Existiu algum programa concreto para modificar a cultura da instituição?
Was there any program held to transform the organisational culture?

☐ Sim *Yes* ☐ Não *No*

26. Classifique cada uma das seguintes actividades, tendo em atenção o tempo consumido. Atribua 1 áquela a que a sua instituição dedica mais tempo, 2 à seguinte e assim sucessivamente.
Think in terms of the amount of time your organisation spends n the following activities. Assign 1 to the most time-consuming, 2 to the next, 3 to the following, etc.

	Posição *Rank*
Planeamento Etratégico *Strategic Planning*	
Audição dos Munícipes *Listening to citizens*	
Audição do Pessoal *Listening to the staff*	
Resolução dos problemas imediatos *Fire-fighting*	

27. Quais dos seguintes conceitos são aplicados pela sua instituição no sentido de atingir sistematicamente um nível mais elevado de Qualidade? (Assinale todos os que se aplicam e classifique-os de acordo com a importância, atribuindo 1 ao mais importante, 2 ao seguinte e assim sucessivamente)
Which of the following Quality concepts does your organisation use to achieve Quality? (Tick all that apply and rank these concepts in terms of importance to the institution's quality improvement activities. Assign 1 to the most important, 2 to the next, 3 to the following, etc)

	Posição *Rank*
Liderança *Leadership*	
Melhoria contínua *Continuous improvement*	
Aposta na Prevenção *Prevention*	
Avaliação e Gestão dos Recursos *Measurement of resources*	
Melhoria dos Processos *Process improvement*	
Satisfação dos Clientes Internos (Colaboradores) *Internal customer satisfaction*	
Satisfação dos Clientes Externos *External customer satisfaction*	
Gestão das Pessoas *People management*	
Trabalho em Equipa *Teamwork*	
Gestão baseada em dados e factos *Management by fact*	
Envolvimento e relacionamento com fornecedores *Suppliers involvement*	
Outro. Por favor especifique: *Other. Please specify:* _____	

28. Na análise e resolução de problemas quais das seguintes ferramentas e abordagens são aplicadas? (Assinale todas as relevantes)
Which of the following tools and approaches are used in the problem solving process? Tick all that apply.

- ☐ Fluxogramas *Fluxograms*
- ☐ Histogramas *Histograms*
- ☐ Diagramas causa-efeito ou espinha de peixe *Fishbone diagrams*
- ☐ Diagramas de Pareto *Pareto charts*
- ☐ Cartas de Controlo *Control Charts*
- ☐ Diagramas de Afinidade (KJ) *KJs*
- ☐ Brainstorming *Brainstorming*
- ☐ Desdobramento da Função Qualidade *Quality Function Deployment*
- ☐ Equipas *Teamwork*
- ☐ Círculos da Qualidade *Quality Circles*

29. Existe algum sistema para determinar os Custos da Qualidade e da Não Qualidade?
Does the institution have in place any system to determine Quality and Poor-Quality Costs?

☐ Sim *Yes* ☐ Não *No*

30. A insituição utiliza algum tipo de *benchmarking*, isto é, compara os seus processos com os de outras instituições, com a finalidade de identificar formas eficientes de funcionamento e adoptar essas práticas?
Does the institution use any kind of benchmarking (that is, compares its own processes with those of other institutions in order to identify efficient practices and adopt them?

☐ Sim *Yes* ☐ Não *No*

31. Que tipo de medidas é utilizado para avaliar o progresso da instituição na Gestão da Qualidade? (Assinale todas as que se aplicam)
What measurement instruments are used to evaluate the progress of the institution's Quality Management? (Tick all that apply)

- ☐ Nível de obtenção das metas definidas *Quality goal achievement*
- ☐ Indicadores financeiros *Financial performance*
- ☐ Indicadores não financeiros *Non-financial performance*
- ☐ Bom funcionamento dos processos *Process Excellence*
- ☐ Outro. Por favor especifique: *Other. Please specify:* _____

32. Indique o número aproximado de fornecedores da sua instituição
Indicate the approximate number of suppliers of your institution

- ☐ Menos de 20 *Less than 20*
- ☐ Entre 20 e 50 *Between 20 and 50*
- ☐ Entre 50 e 100 *Between 50 and 100*
- ☐ Entre 100 e 500 *Between 100 and 500*
- ☐ Mais de 500 *More than 500*

33. Quais os critérios utilizados na selecção dos fornecedores? Na coluna da esquerda, assinale, por favor, todos os que se aplicam. Em seguida, escolha os três que julga serem os mais importantes e classifique-os na coluna da direita. Atribua 1 ao mais importante, 2 ao seguinte e assim sucessivamente.
What are the criteria used when selecting a supplier? Tick any that apply in the column of the left. Then, choose the three most important ones in your point of view, and, on the column of the right, rank them. Assign 1 to the most important, 2 to the next, and 3 to the following.

		Posição *Rank*
	Preço *Price*	
	Qualidade do produto/serviço fornecido *Quality of the product/service*	
	Cumprimento de Prazos de Entrega *On time delivery*	
	Criação de parcerias estratégicas *Creation of strategic partnerships*	
	Fornecedor certificado *Certified supplier*	

34. Que bases são utlizadas na avaliação do desempenho da instituição? (Assinale todas as alternativas que se aplicam)
How does the institution evaluate organisational performance (Tick all that apply)

- ☐ Situação financeira e orçamental *Financial and budgetary condition*
- ☐ Cumprimento dos objectivos estratégicos definidos *Achievement of the strategic goals*
- ☐ Qualidade do serviço prestado *Quality of the services provided*
- ☐ Competitividade *Competitiveness*
- ☐ Impacto na qualidade de vida dos munícipes *Impact on the citizens' quality of life*
- ☐ Outra. Por favor especifique: *Other. Please specify:*

35. Como descreve globalmente o desempenho da instituição?
How would you describe the overall organisational performance of your institution?

- ☐ Excelente *Excellent*
- ☐ Muito Bom *Very Good*
- ☐ Bom *Good*
- ☐ Razoável *Fair*
- ☐ Fraco *Poor*

36. Como avalia a qualidade geral da instituição?
How would you describe the overall quality of your institution?

- ☐ Excelente *Excellent*
- ☐ Muito Boa *Very Good*
- ☐ Boa *Good*
- ☐ Razoável *Fair*
- ☐ Fraca *Poor*

37. Quais são os planos futuros da instituição para melhorar a qualidade dos serviços prestados?
What is the Municipality future plan to further improve the quality of the services provided?

- [ ] Obter a Certificação ISO 9000
  Obtain ISO9000 certification
- [ ] Concorrer a um Prémio de Excelência
  Bid for quality award
- [ ] Solicitar a Certificação no âmbito do SQSP
  Obtain the certification within the SQSP
- [ ] Implementar a Gestão pela Qualidade Total
  Implement TQM
- [ ] Efectuar Auto-Avaliação
  Conduct a self-assessment exercise
- [ ] Procurar a Excelência Organizacional
  Pursue Business Excellence
- [ ] Outro . Por favor especifique:
  Other. Please specify: _____

38. Se deseja acrescentar algo ou se tem quaisquer comentários e/ou sugestões, por favor não deixe de o fazer.
Please feel free to add any commentaries and/or suggestions.

_____
_____
_____
_____
_____

SECÇÃO B: OUTROS DADOS

SECTION B: ADDITIONAL DATA

39. Nome do Município:
(Confidencialidade assegurada)
Municipality Name:
(you are reassured of anonymity) _____

40. Número de funcionários:
Number of employees: _____

41. Pessoa a contactar
About you as a contact person

Nome:
Name: _____

Cargo:
Position: _____

Número de telefone:
Telephone number: _____

Fax:
Fax: _____

Email:
Email: _____

☐ **Por favor assinale caso deseje receber um resumo dos resultados.**
If you wish to receive a summary of the findings, please cross this box.

MUITO OBRIGADO PELA SUA COLABORAÇÃO
THANK YOU VERY MUCH FOR YOUR CO-OPERATION

Por favor remeta o questionário para o seguinte endereço utilizando o envelope selado que lhe foi fornecido:

Patrícia Moura e Sá
Faculdade de Economia da Universidade de Coimbra - Gab 210
Avenida Dias da Silva, 165
3004 - 512 COIMBRA
PORTUGAL

GLOSSÁRIO

CERTIFICAÇÃO ISO 9000	Corresponde ao reconhecimento por parte de uma entidade terceira de que a organização dispõe de um SISTEMA DA QUALIDADE implementado de acordo com as normas internacionais ISO.
CLIENTE EXTERNO	É o destinatário final dos serviços que a organização presta (por exemplo, munícipes, empresas, Governo e cidadões de forma geral)
CLIENTE INTERNO	Colaborador ou funcionário que, para a realização das suas tarefas, necessita de inputs (materiais e informação) fornecidos por um outro elemento da organização.
EXCELÊNCIA ORGANIZACIONAL	Forma de gestão que se baseia na medição simultânea do nível de satisfação dos clientes, colaboradores e restantes *stakeholders* com o intuito de fornecer uma avaliação global e completa do desempenho da organização.
GESTÃO PELA QUALIDADE TOTAL	Modo de gestão de uma organização assente no princípio da melhoria contínua e baseado na participação e empenho de todos os seus membros, visando a satisfação dos clientes e o benefício dos seus colaboradores e da sociedade no seu todo.
PROCESSO	Conjunto de recursos e actividades inter'relacionadas que transformam inputs em outputs
PRODUTO	Resultado de actividades ou processos. Em sentido lato, inclui também serviços.
QUALIDADE	Conjunto de propriedades e características de uma entidade que lhe conferem aptidão para satisfazer as necessidades explíctas ou implícitas (ISO 8402)
STAKEHOLDERS	Todos aqueles que, de uma forma ou de outra, têm interesses na organização.
SISTEMA DA QUALIDADE	Conjunto da Estrutura Organizacional, dos Procedimentos, dos Processos e dos Recursos necessários para implementar a Gestão da Qualidade.

APPENDIX B

ORGANISATIONAL EXCELLENCE MEASUREMENT:

ORGANISATIONAL EXCELLENCE QUESTIONNAIRE

ADDITIONAL RESULTS FOR THE 85 MUNICIPALITIES

ADDITIONAL RESULTS FOR THE SMALL-SCALE STUDY

INQUÉRITO DE AVALIAÇÃO DOS FACTORES CRÍTICOS PARA A QUALIDADE E EXCELÊNCIA DE UM MUNICÍPIO

CRITICAL SUCCESS FACTORS AND ORGANISATIONAL EXCELLENCE QUESTIONNAIRE FOR A MUNICIPALITY

O objectivo deste inquérito é o de conhecer o modo como avalia a implementação na sua Câmara de um conjunto de práticas e factores considerados fundamentais para a gestão de um Município. De forma alguma se pretende com este inquérito avaliar individualmente cada Câmara Municipal, mas antes construir um modelo genérico e determinar os relacionamentos entre as diferentes variáveis envolvidas. É nosso propósito que os resultados desta investigação possam de alguma forma apoiar as Câmaras que pretendam implementar a Gestão da Qualidade com o intuito de melhorar o funcionamento das actividades desenvolvidas pelo Município.

Agradecemos sinceramente o seu tempo e interesse.

Instruções: Nas questões seguintes assinale com uma cruz (X) a opção que melhor representar o nível de implementação/utilização na sua Câmara Municipal de cada uma das práticas.

The purpose of this survey is to determine your perception of the extent to which your municipality practices TQM critical success factors and their effect on organisational excellence. The measurement items in this survey are by no means an attempt to assess individual municipalities but to model and measure relationships between critical success factors and excellence. It is hoped that the outcomes of this research will help institutions to implement TQM and improve performance.

Thank you for your time and interest.

***Directions**: In all the following, please cross the appropriate box to indicate how you would rate the extent to which your institution practices TQM critical success factors and evaluates organisational excellence.*

Secção A – Liderança/ *Section A: Leadership*

Cultura e Valores da Instituição */Organisational Values*
Até que ponto:/ *The extent to which:*:

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes criam valores partilhados e interpretações comuns da realidade e dos problemas *Leaders develop shared meanings and interpretations of reality*										
• Os líderes tomam decisões de acordo com os princípios e valores da instituição *Leaders use the municipality's values and principles to guide decision-making*										
• Os líderes implementam políticas e práticas que reforçam e são consistentes com os princípios e valores enunciados *Leaders put in place reinforcement systems that are consistent with the stated values and principles*										

Visão/*Vision*

Até que ponto: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes têm uma visão convincente e desafiante do futuro da Câmara *Leaders create a compelling vision of the future of the municipality*										
• Os líderes comunicam a visão de forma eficaz *Leaders communicate the vision effectively*										
• Os líderes inspiram confiança na visão pelo modo como actuam *Leaders inspire confidence in vision*										

Missão/*Mission*

Até que ponto:/ *The extent to which*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes definem qual o papel fundamental da Câmara *Leaders identify the municipality's overall purpose*										
• Os líderes criam empenho entre os funcionários no sentido da concretização dos grandes projectos da Câmara *Leaders generate commitment among members for pursuing the municipality's purpose*										

Estratégia/ *Strategy*

Até que ponto: / The extent to which:

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes desenvolvem estratégias e políticas consistentes com a missão, visão e valores definidos *Leaders develop strategies and policies consistent with the mission, vision and values*										
• Os líderes antecipam e guiam as mudanças *Leaders anticipate and guide change*										
• Os líderes avaliam regularmente os recursos utilizados e resultados alcançados com o objectivo de reverem as estratégias e melhor servirem os cidadãos *Leaders monitor resources and organisational performance and use feedback to review strategies for citizen satisfaction*										

Assuntos-chave / *Key Issues*

Até que ponto: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes alinham a estrutura da organização de modo a melhor colocar em prática a estratégia e políticas escolhidas *Leaders align the organisation's structure to support delivery of its policy and strategy*										

	1	2	3	4	5	6	7	8	9	10
• Os líderes dão aos seus subordinados autoridade e meios para que estes tomem decisões *Leaders give subordinates authority to act and make decisions*										
• Os líderes criam relações de parceria e cooperação com colegas e subordinados de forma a aumentar a motivação *Leaders communicate and build supportive relationships with peers and subordinates in order to motivate people*										

Excelência na Liderança/ *Leadership Excellence*

Até que ponto: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes são acessíveis, ouvindo os outros com atenção e dando respostas às suas preocupações *Leaders are accessible, actively listening and responding to people*										
• Os líderes promovem a troca de opiniões e o envolvimento de todos *Leaders promote discussion, feedback and involvement*										
• Os líderes encorajam a melhoria contínua através do incentivo a inovar e aprender *Leaders encourage continuous improvement through innovation and continuous learning*										
• Os líderes procuram aprender com os melhores exemplos por forma a melhorarem as suas capacidades de liderança *Leaders look for best practices in order to improve their leadership skills*										

Secção 2 – Factores Críticos de Sucesso e Excelência do Município / *Section 2: Critical Success Factors and Organisational Excellence*

Liderança para a Gestão da Qualidade/ *Leadership for Quality Management*

Até que ponto: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os líderes assumem pessoalmente responsabilidade pela Qualidade da instituição *Leaders personally assume responsibility for quality performance*										
• Os líderes têm um plano para gerir a Qualidade *Leaders have a strategic quality planning process*										
• Os chefes dos diversos departamentos e secções participam e apoiam as iniciativas para a melhoria da Qualidade *Heads of departments participate and support quality improvement initiatives*										
• Os objectivos de Qualidade do Município estão claramente definidos *The municipality's quality goals are clearly defined*										
• As preocupações com a Qualidade estão regularmente presentes no modo com a Câmara é gerida *The quality values are integrated into day-to-day management*										

Clientes e Cidadãos / *Delight the Customers and Citizens*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Determina as exigências e expectativas actuais e futuras dos seus clientes e cidadãos *Determines current and future customer/citizen requirements and expectations*										
• Utiliza as informações e opiniões dos clientes/cidadãos e funcionários para melhorar os serviços prestados *Uses information gained from customers and staff to improve customer services*										

Satisfação dos clientes externos/cidadãos / *External Customers/Citizens Satisfaction*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Tem procedimentos e práticas constantemente orientados para a satisfação dos clientes/cidadãos *Has practices and procedures consistently focused on delivering customer/citizen satisfaction*										
• Lida correctamente com reclamações e utiliza a informação para prevenir a repetição dos mesmos problemas e para melhorar a qualidade dos serviços prestados *Handles complaints, resolves them, and uses complaint information for quality improvement and for prevention of recurrence of problems*										
• Fornece de forma consistente serviços de valor para os seus clientes/cidadãos *Consistently provides services that create value for its citizens and customers*										
• Compara a satisfação dos seus clientes/ munícipes com a proporcionada por outros municípios e, nos casos aplicáveis, concorrentes privados relevantes *Compares its citizen/customer satisfaction results with those of other municipalities and relevant private sector competitors*										

Satisfação dos clientes internos/pessoal / *Internal Customers/Staff Satisfaction*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• É um bom local de trabalho *Is a good place to work*										
• Está empenhada na satisfação das necessidades do pessoal *Is committed to satisfy its staff needs*										
• Incute nas pessoas a ideia que todos têm os seus fornecedores e clientes *Makes everyone aware of the fact they all have customers and suppliers*										

	1	2	3	4	5	6	7	8	9	10
• Encoraja a interacção e comunicação entre os seus funcionários e os cidadãos/utentes *Encourages strong employee interaction with customers/citizens and suppliers*										

Gestão baseada em Factos / *Management by Fact*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Avalia e mede os resultados das iniciativas que leva a cabo para melhorar a qualidade dos serviços *Has performance measurement systems to evaluate its quality improvement efforts*										
• Informa e comunica aos cidadãos, utentes e outras partes interessadas os principais indicadores do seu desempenho *Disseminates key performance measures to citizens and other stakeholders*										
• Usa os indicadores de desempenho para melhorar o funcionamento e a qualidade dos serviços prestados *Uses the performance measurements to improve its services*										

Todo o Trabalho é Processo / *All Work is Process*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Identifica as actividades e processos críticos para o seu bom funcionamento *Identifies its critical process for improvement*										
• Tem métodos para melhorar a coordenação de tarefas interdependentes *There are methods to improve co-ordination of interdependent tasks*										
• Tem processos concebidos para responder às exigências de qualidade *Has processes designed to meet all the quality requirements*										
• Tem sistemas e metodologias para conceber processos e serviços inovadores *Has systems and methodologies for designing innovative processes and services*										
• Tem políticas eficazes para seleccionar os seus fornecedores *Has effective policies for selecting the suppliers*										

Medição / *Measurement*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Recolhe um vasto conjunto de indicadores fiáveis de desempenho *Collects a wide range of complete and accurate performance indicators*										

	1	2	3	4	5	6	7	8	9	10
• Usa métodos para avaliar e medir a satisfação dos clientes/cidadãos *Uses methods for assessing and measuring citizens and customers satisfaction*										
• Tem uma metodologia adequada para avaliar e comparar a qualidade dos serviços prestados *Has an appropriate methodology for assessing and comparing quality*										

Gestão Baseada nas Pessoas / *People-Based Management*

Até que ponto a Câmara: *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Tem um sistema de gestão dos recursos humanos de acordo com a política de Qualidade definida *Has a human resource management system that supports its quality policy*										
• Tem políticas eficazes para recrutar e manter o pessoal mais competente *Has effective policies for recruiting and maintaining outstanding staff*										
• Comunica aos seus funcionários os resultados das avaliações do seu desempenho e do modo como realizam o seu trabalho *Feedback is provided to employees on their performance*										
• Fornece aos seus funcionários os meios necessários à realização de um bom trabalho *Provides employees with the necessary means for them to successfully perform their jobs*										
• Encoraja os seus funcionários para que estes contribuam activamente para a melhoria da qualidade *Employers are encouraged to contribute effectively to quality improvement*										

Trabalho em equipa / *Teamwork*

Até que ponto a Câmara: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Incentiva o trabalho em equipa *Employees are encouraged to work in teams*										
• Utiliza equipas para resolver problemas que envolvem várias funções/departamentos *Teams are used to solve cross-functional problems*										
• Utiliza equipas para resolver problemas locais e pontuais *Action-teams are used to solve local problems*										

As Pessoas fazem a Qualidade/ *People Make Quality*

Até que ponto: / *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• É dada aos gestores, directores e chefes de divisão formação na área de Qualidade *Quality related training is given to managers and heads of departments*										
• É dada a todos os funcionários formação na área de Qualidade *Quality related training is given to all staff*										
• A Câmara fornece às pessoas meios para que melhorem a eficiência e eficácia dos serviços prestados *The municipality provides resources for people to improve the effectiveness and efficiency of the services provided*										
• A Câmara reconhece e recompensa as pessoas e equipas que contribuem significativamente para a melhoria da qualidade *The municipality rewards people and teams that make significant contributions to quality improvement*										
• Existe um clima de cooperação que permite assumir riscos *There is a collaborative and risk-taking environment*										

Melhoria Contínua / *Continuous Improvement*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Está atenta a mudanças nas necessidades e expectativas dos seus clientes/utentes e procura a elas dar resposta *Monitors and is responsive to changes in customer/citizen demands and expectations*										
• Aplica ferramentas para melhorar a qualidade dos processos *Applies methods and tools to improve the quality of its processes*										

Ciclo de melhoria contínua / *Continuous Improvement Cycle*

Atè que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Tem uma cultura de melhoria contínua *Has a culture of continuous improvement*										
• Tem um sistema para recolher as sugestões de funcionários e cidadãos/utentes *Has an active scheme for collecting suggestions from employees and customers*										
• Avalia os progressos alcançados e compara-os com os de outros municípios e, quando aplicável, com os de concorrentes do sector privado *Compares current quality levels with past performance levels and those achieved by other municipalities and relevant private sector competitors*										

Prevenção / *Prevention*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Procura prevenir potenciais problemas fazendo bem à primeira vez *Tries to prevent potential problems by doing the things right at first time*										
• Identifica as causas dos problemas, analisa-as e elimina-as *When problems occur, the root causes are traced, analysed and removed*										

Excelência Organizacional / *Organisational Excellence*

Até que ponto a Câmara: / *The extent to which the municipality:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Atinge os seus objectivos *Achieves its goals*										
• Tem uma boa imagem junto de munícipes e utentes *Has a good overall image among its citizens and other stakeholders*										
• Tem uma situação financeira saudável *Is financially healthy*										
• Tem grande procura para os serviços que fornece *Has high customer demand for the services provided*										
• Contribui para o desenvolvimento e melhoria da qualidade de vida da comunidade local *Contributes to the development and quality of life of its local community*										

ADDITIONAL RESULTS FOR THE 85 MUNICIPALITIES

- **Item Correlation Analysis** SEE Table 1 (Page B16)

- **Structural Model Results**

CONSTRUCT	INDEX
LEAD	63.4
CCD	70.5
ECS	64.6
ICS	68.3
MBF	59.0
AWP	59.2
MEAS	48.4
PBM	62.7
TEAM	66.2
PMQ	60.3
CI	67.0
CIC	62.8
PREV	63.5
OE	74.4

Table 2. Latent variable scores

ITEM	LEAD	CCD	ECS	ICS	MBF	AWP	MEASURE
PRESP	0.290237						
HEADSP	0.166579						
QGOALS	0.190954						
DAILY	0.536537						
EXPECT		0.414605					
USEQI		0.655291					
FOCUS			0.358694				
COMPLAIN			0.226690				
VALUECR			0.268605				
SATCOMP			0.358341				
WORK				0.325311			
NEEDSAT				-0.04460			
ICIDEA				0.231492			
INTERACT				0.611804			
PERFMEAS					0.351715		
DISSEM					0.416955		
USEMEAS					0.296267		
CRITID						0.44190	
DESIGNQ						0.22622	
SUPPLIER						0.541287	
COMPACC							0.462996
CUSTMEAS							0.615619

Table 3.A. Outer coefficients (I)

ITEM	PBM	TEAM	PMQ	CI	CIC	PREVENT	OE
HRMSUP	0.352186						
RECRUIT	0.239762						
FEEDBACK	0.096967						
EMPPART	0.540795						
ENCOUR		0.554363					
CROSS		0.481944					
QTRMGRS			0.194849				
RESOURCES			0.463838				
RISKENV			0.550626				
RESPONS				0.635644			
TOOLS				0.424782			
CICULT					0.644833		
SUGGEST					0.188525		
BENCH					0.359486		
FIRST						0.182447	
ROOT						0.841670	
GLACHIEVE							0.255441
IMAGE							0.301290
FINANCE							0.173814
DEMAND							0.250109
QUALIFE							0.257039

Table 3.B. Outer coefficients (II)

	1	2	3	4	5	Σ	Index
LEADERSHIP							
w_i (weight)	0.290237	0.166579	0.190954	0.536537		1.184307	
x_i (mean)	7.529412	6.082353	5.882353	6.741176			
$w_i x_i$	2.185317	1.013194	1.123259	3.616891		7.938661	
							63.3
CUSTOMERS AND CITIZENS DELIGHT							
w_i (weight)	0.414605	0.655291				1.069896	
x_i (mean)	7.188235	7.447059					
$w_i x_i$	2.980281	4.879992				7.860273	
							70.5
EXTERNAL CUSTOMER SATISFACTION							
w_i (weight)	0.358694	0.22669	0.268605	0.358341		1.21233	
x_i (mean)	7.4	7.235294	7.223529	5.670588			
$w_i x_i$	2.654333	1.640168	1.940276	2.032003		8.26678	
							64.6
INTERNAL CUSTOMER SATISFACTION							
w_i (weight)	0.325311	-0.0446	0.231492	0.611804		1.124007	
x_i (mean)	7.294118	7.670588	6.517647	7.352941			
$w_i x_i$	2.372857	-0.3421	1.508785	4.498558		8.0381	
							68.3
MANAGEMENT BY FACT							
w_i (weight)	0.351715	0.416955	0.296267			1.064937	
x_i (mean)	6.341176	6.352941	6.2				
$w_i x_i$	2.230287	2.648893	1.836853			6.716033	
							59.0
ALL WORK IS PROCESS							
w_i (weight)	0.44419	0.22622	0.541287			1.211697	
x_i (mean)	6.470588	5.811765	6.435294				
$w_i x_i$	2.874172	1.314738	3.483339			7.672249	
							59.2
MEASUREMENT							
w_i (weight)	0.462996	0.615619				1.078615	
x_i (mean)	5.552941	5.211765					
$w_i x_i$	2.570989	3.208461				5.77945	
							48.4
PEOPLE BASED MANAGEMENT							
w_i (weight)	0.352186	0.239762	0.096967	0.540795		1.22971	
x_i (mean)	5.788235	6.658824	6.058824	7.305882			
$w_i x_i$	2.038538	1.596532	0.587506	3.950982		8.173558	
							62.7
TEAMWORK							
w_i (weight)	0.554363	0.481944				1.036307	
x_i (mean)	7	6.905882					
$w_i x_i$	3.880539	3.328246				7.208785	
							66.2

	1	2	3	4	5	Σ	Index
PEOPLE MAKE QUALITY							
w_i (weight)	0.194849	0.463838	0.550626			1.209313	
x_i (mean)	6.105882	6.811765	6.223529				
$w_i\ x_i$	1.189723	3.159558	3.426837			7.776118	
							60.3
CONTINUOUS IMPROVEMENT							
w_i (weight)	0.635644	0.424782				1.060426	
x_i (mean)	7.094118	6.929412					
$w_i\ x_i$	4.509332	2.943491				7.452823	
							67.0
CONTINUOUS IMPROVEMENT CYCLE							
w_i (weight)	0.644833	0.188525	0.359486			1.192844	
x_i (mean)	7.117647	5.964706	6.164706				
$w_i\ x_i$	4.589691	1.124498	2.216125			7.930314	
							62.8
PREVENTION							
w_i (weight)	0.182447	0.84167				1.024117	
x_i (mean)	6.694118	6.717647					
$w_i\ x_i$	1.22132	5.65404				6.87536	
							63.5
ORGANISATIONAL EXCELLENCE							
w_i (weight)	0.255441	0.30129	0.173814	0.250109	0.257039	1.237693	
x_i (mean)	7.282353	7.435294	7.4	7.752941	8.564706		
$w_i\ x_i$	1.86021	2.240182	1.286224	1.939077	2.201465	9.527158	
							74.4

Table 4. Index calculation

	LEAD	CCD	ECS	ICS	MBF	AWP	MEASURE	PBM	TEAM	PMQ	CI	CIC	PREV
LEAD													
CCD	0.590724												
ECS		0.682973											
ICS		0.748558											
MBF	0.670169												
AWP					0.717624								
MEASURE					0.76019								
PBM	0.65528												
TEAM								0.731159					
PMQ								0.674252					
CI	0.624674												
CIC											0.815972		
PREVENT											0.736953		
OE			0.278828	0.12906		-0.04148	-0.11774		0.075573	0.151169		0.006019	0.42507

Table 5. Inner coefficients

	Q11	Q12	Q13	Q14	Q15	Q21	Q22	Q31	Q32	Q33	Q34	Q41	Q42	Q43	Q44	Q51	Q52	Q53	Q61	Q62	Q63	Q64	Q65
Q11	1.00																						
Q12	0.58	1.00																					
Q13	0.43	0.63	1.00																				
Q14	0.44	0.74	0.62	1.00																			
Q15	0.62	0.54	0.49	0.75	1.00																		
Q21	0.44	0.38	0.25	0.41	0.46	1.00																	
Q22	0.47	0.30	0.28	0.43	0.60	0.73	1.00																
Q31	0.42	0.30	0.29	0.49	0.48	0.60	0.61	1.00															
Q32	0.57	0.32	0.46	0.50	0.63	0.47	0.54	0.60	1.00														
Q33	0.61	0.41	0.49	0.48	0.58	0.54	0.47	0.49	0.83	1.00													
Q34	0.40	0.36	0.47	0.38	0.46	0.49	0.47	0.43	0.59	0.63	1.00												
Q41	0.40	0.35	0.23	0.47	0.52	0.50	0.51	0.45	0.46	0.48	0.37	1.00											
Q42	0.36	0.19	0.08	0.31	0.40	0.42	0.52	0.47	0.41	0.34	0.19	0.75	1.00										
Q43	0.46	0.48	0.30	0.52	0.54	0.59	0.60	0.53	0.43	0.42	0.48	0.57	0.48	1.00									
Q44	0.49	0.28	0.36	0.44	0.59	0.67	0.69	0.58	0.48	0.45	0.43	0.68	0.62	0.62	1.00								
Q51	0.45	0.45	0.54	0.60	0.55	0.42	0.40	0.52	0.69	0.69	0.56	0.51	0.35	0.34	0.44	1.00							
Q52	0.46	0.40	0.45	0.54	0.57	0.46	0.50	0.51	0.69	0.70	0.51	0.49	0.29	0.41	0.42	0.80	1.00						
Q53	0.46	0.45	0.56	0.61	0.56	0.41	0.49	0.46	0.65	0.59	0.50	0.44	0.25	0.35	0.36	0.83	0.84	1.00					
Q61	0.55	0.45	0.46	0.52	0.61	0.37	0.38	0.47	0.67	0.64	0.58	0.46	0.35	0.39	0.39	0.72	0.63	0.64	1.00				
Q62	0.51	0.47	0.43	0.57	0.55	0.32	0.35	0.43	0.57	0.51	0.54	0.46	0.32	0.40	0.39	0.63	0.57	0.61	0.83	1.00			
Q63	0.48	0.51	0.44	0.56	0.53	0.33	0.37	0.43	0.54	0.55	0.51	0.44	0.29	0.43	0.40	0.68	0.64	0.66	0.75	0.79	1.00		
Q64	0.43	0.42	0.41	0.52	0.50	0.28	0.37	0.31	0.52	0.49	0.41	0.42	0.35	0.36	0.38	0.63	0.56	0.64	0.68	0.72	0.86	1.00	
Q65	0.31	0.21	0.26	0.33	0.44	0.47	0.49	0.48	0.43	0.32	0.46	0.44	0.31	0.33	0.52	0.35	0.47	0.45	0.43	0.46	0.42	0.39	1.00

	Q11	Q12	Q13	Q14	Q15	Q21	Q22	Q31	Q32	Q33	Q34	Q41	Q42	Q43	Q44	Q51	Q52	Q53	Q61	Q62	Q63	Q64	Q65
Q71	0.42	0.48	0.50	0.53	0.50	0.42	0.38	0.45	0.57	0.58	0.67	0.43	0.20	0.39	0.35	0.74	0.66	0.74	0.77	0.76	0.75	0.70	0.54
Q72	0.46	0.47	0.53	0.51	0.39	0.53	0.47	0.51	0.58	0.65	0.72	0.38	0.23	0.50	0.33	0.63	0.61	0.65	0.51	0.55	0.54	0.47	0.36
Q73	0.35	0.39	0.54	0.49	0.47	0.31	0.29	0.35	0.49	0.55	0.63	0.43	0.17	0.30	0.33	0.70	0.62	0.68	0.72	0.67	0.67	0.65	0.47
Q81	0.44	0.48	0.52	0.53	0.52	0.35	0.34	0.40	0.59	0.63	0.55	0.55	0.29	0.45	0.41	0.69	0.68	0.63	0.69	0.69	0.74	0.67	0.47
Q82	0.32	0.16	0.38	0.34	0.42	0.43	0.41	0.43	0.42	0.36	0.42	0.50	0.33	0.37	0.63	0.39	0.43	0.40	0.44	0.54	0.42	0.46	0,73
Q83	0.34	0.26	0.41	0.40	0.41	0.28	0.42	0.41	0.51	0.37	0.40	0.48	0.44	0.42	0.47	0.44	0.40	0.49	0.35	0.35	0.38	0.44	0.55
Q84	0.28	0.21	0.09	0.22	0.33	0.36	0.37	0.31	0.33	0.39	0.28	0.61	0.54	0.41	0.47	0.40	0.30	0.28	0.32	0.26	0.32	0.32	0.24
Q85	0.45	0.20	0.23	0.31	0.59	0.48	0.59	0.46	0.57	0.54	0.38	0.64	0.58	0.51	0.61	0.47	0.49	0.44	0.42	0.32	0.33	0.30	0.40
Q91	0.51	0.40	0.37	0.54	0.64	0.53	0.60	0.52	0.58	0.52	0.45	0.61	0.52	0.47	0.62	0.56	0.52	0.55	0.55	0.61	0.50	0.50	0.46
Q92	0.53	0.35	0.30	0.47	0.60	0.56	0.58	0.53	0.56	0.50	0.52	0.54	0.43	0.46	0.65	0.51	0.44	0.47	0.50	0.59	0.44	0.43	0.57
Q93	0.51	0.27	0.31	0.39	0.52	0.59	0.54	0.58	0.56	0.54	0.49	0.47	0.42	0.39	0.62	0.53	0.46	0.47	0.46	0.52	0.36	0.35	0.52
Q101	0.33	0.36	0.31	0.46	0.44	0.16	0.29	0.31	0.44	0.43	0.30	0.39	0.32	0.35	0.26	0.46	0.36	0.43	0.40	0.40	0.55	0.53	0.10
Q102	0.36	0.46	0.48	0.51	0.47	0.23	0.24	0.34	0.48	0.45	0.49	0.30	0.20	0.36	0.22	0.53	0.44	0.51	0.45	0.46	0.53	0.50	0.25
Q103	0.34	0.43	0.38	0.46	0.45	0.54	0.49	0.50	0.40	0.44	0.41	0.55	0.46	0.47	0.52	0.48	0.42	0.40	0.38	0.37	0.40	0.33	0.44
Q104	0.15	0.24	0.31	0.29	0.23	0.41	0.42	0.42	0.30	0.28	0.53	0.46	0.33	0.43	0.40	0.37	0.34	0.39	0.29	0.43	0.27	0.29	0.52
Q105	0.25	0.29	0.37	0.41	0.38	0.50	0.49	0.48	0.37	0.31	0.47	0.51	0.36	0.42	0.48	0.40	0.41	0.48	0.37	0.49	0.35	0.30	0.58
Q111	0.54	0.40	0.45	0.49	0.52	0.57	0.52	0.65	0.64	0.59	0.57	0.52	0.36	0.56	0.56	0.57	0.65	0.57	0.61	0.61	0.55	0.43	0.59
Q112	0.55	0.40	0.40	0.45	0.47	0.59	0.53	0.63	0.62	0.60	0.48	0.56	0.46	0.49	0.57	0.61	0.61	0.59	0.61	0.60	0.59	0.54	0.49
Q121	0.41	0.45	0.31	0.54	0.54	0.54	0.54	0.48	0.46	0.46	0.32	0.56	0.40	0.51	0.45	0.45	0.53	0.49	0.40	0.44	0.33	0.26	0.46
Q122	0.31	0.20	0.33	0.35	0.38	0.38	0.39	0.42	0.53	0.47	0.59	0.42	0.25	0.36	0.36	0.52	0.48	0.52	0.53	0.57	0.47	0.38	0.36
Q123	0.33	0.36	0.38	0.38	0.39	0.40	0.42	0.53	0.48	0.39	0.70	0.36	0.25	0.46	0.40	0.48	0.48	0.49	0.51	0.56	0.49	0.37	0.47
Q131	0.36	0.45	0.37	0.47	0.49	0.60	0.51	0.56	0.40	0.44	0.43	0.46	0.39	0.47	0.43	0.44	0.43	0.46	0.47	0.45	0.37	0.30	0.56
Q132	0.43	0.38	0.40	0.49	0.55	0.62	0.58	0.66	0.52	0.45	0.49	0.48	0.42	0.51	0.58	0.43	0.42	0.45	0.49	0.50	0.37	0.30	0.69
Q141	0.33	0.38	0.36	0.51	0.46	0.53	0.51	0.68	0.43	0.46	0.45	0.62	0.49	0.49	0.52	0.49	0.53	0.50	0.46	0.44	0.40	0.34	0.69
Q142	0.47	0.44	0.32	0.51	0.55	0.64	0.65	0.62	0.51	0.51	0.43	0.59	0.58	0.60	0.50	0.48	0.53	0.51	0.49	0.42	0.41	0.32	0.48
Q143	0.27	0.22	0.27	0.32	0.35	0.44	0.35	0.33	0.20	0.20	0.35	0.22	0.33	0.37	0.37	0.20	0.13	0.18	0.22	0.22	0.11	0.13	0.31
Q144	0.41	0.32	0.34	0.42	0.47	0.56	0.51	0.53	0.46	0.43	0.35	0.32	0.42	0.43	0.46	0.30	0.38	0.34	0.35	0.32	0.27	0.19	0.49
Q145	0.39	0.22	0.21	0.29	0.38	0.49	0.59	0.52	0.43	0.36	0.24	0.32	0.49	0.48	0.45	0.28	0.33	0.32	0.23	0.13	0.20	0.25	0.25

	Q71	Q72	Q73	Q81	Q82	Q83	Q84	Q85	Q91	Q92	Q93	Q101	Q102	Q103	Q104	Q105	Q111	Q112	Q121	Q122	Q123	Q131	Q132
Q71	1.00																						
Q72	0.71	1.00																					
Q73	0.90	0.63	1.00																				
Q81	0.76	0.59	0.75	1.00																			
Q82	0.49	0.37	0.51	0.57	1.00																		
Q83	0.48	0.44	0.43	0.61	0.52	1.00																	
Q84	0.21	0.18	0.22	0.40	0.30	0.38	1.00																
Q85	0.27	0.25	0.29	0.48	0.45	0.50	0.72	1.00															
Q91	0.55	0.45	0.47	0.59	0.60	0.53	0.40	0.61	1.00														
Q92	0.56	0.43	0.47	0.54	0.62	0.53	0.36	0.52	0.86	1.00													
Q93	0.54	0.42	0.51	0.42	0.50	0.44	0.33	0.53	0.67	0.84	1.00												
Q101	0.40	0.40	0.38	0.44	0.12	0.29	0.43	0.33	0.24	0.17	0.19	1.00											
Q102	0.56	0.57	0.55	0.52	0.23	0.44	0.35	0.31	0.26	0.23	0.31	0.83	1.00										
Q103	0.41	0.45	0.39	0.45	0.45	0.48	0.63	0.54	0.50	0.50	0.52	0.51	0.60	1.00									
Q104	0.50	0.51	0.47	0.42	0.54	0.48	0.39	0.35	0.48	0.52	0.50	0.25	0.42	0.62	1.00								
Q105	0.56	0.53	0.53	0.49	0.60	0.56	0.31	0.39	0.60	0.61	0.59	0.15	0.38	0.62	0.75	1.00							
Q111	0.64	0.60	0.51	0.62	0.58	0.51	0.35	0.49	0.59	0.64	0.61	0.31	0.44	0.56	0.51	0.68	1.00						
Q112	0.62	0.54	0.58	0.58	0.49	0.47	0.48	0.54	0.54	0.56	0.71	0.44	0.54	0.59	0.47	0.61	0.77	1.00					
Q121	0.46	0.46	0.37	0.49	0.46	0.45	0.32	0.53	0.71	0.67	0.60	0.17	0.28	0.54	0.46	0.64	0.70	0.60	1.00				
Q122	0.63	0.59	0.54	0.46	0.31	0.38	0.22	0.33	0.51	0.48	0.52	0.36	0.48	0.39	0.44	0.51	0.56	0.55	0.52	1.00			
Q123	0.66	0.56	0.60	0.55	0.45	0.50	0.23	0.29	0.47	0.54	0.57	0.35	0.54	0.48	0.63	0.60	0.68	0.64	0.47	0.56	1.00		
Q131	0.50	0.45	0.42	0.43	0.49	0.38	0.34	0.47	0.60	0.60	0.65	0.11	0.26	0.58	0.57	0.63	0.62	0.64	0.74	0.48	0.55	1.00	
Q132	0.52	0.47	0.44	0.42	0.58	0.49	0.30	0.54	0.61	0.67	0.72	0.16	0.33	0.56	0.53	0.64	0.69	0.69	0.70	0.52	0.62	0.84	1.00
Q141	0.53	0.50	0.47	0.46	0.62	0.48	0.47	0.49	0.56	0.54	0.56	0.30	0.41	0.66	0.68	0.69	0.68	0.64	0.64	0.46	0.54	0.76	0.73
Q142	0.44	0.50	0.33	0.43	0.44	0.53	0.42	0.61	0.67	0.60	0.56	0.25	0.31	0.60	0.50	0.52	0.61	0.57	0.71	0.46	0.50	0.75	0.72
Q143	0.12	0.28	0.14	0.13	0.31	0.19	0.13	0.18	0.34	0.35	0.28	0.02	0.08	0.28	0.25	0.26	0.26	0.17	0.22	0.19	0.22	0.46	0.41
Q144	0.31	0.45	0.26	0.34	0.44	0.40	0.10	0.31	0.46	0.51	0.46	0.07	0.17	0.41	0.31	0.43	0.48	0.35	0.50	0.29	0.35	0.57	0.60
Q145	0.13	0.26	0.10	0.19	0.30	0.38	0.34	0.49	0.42	0.38	0.39	0.22	0.21	0.39	0.30	0.31	0.35	0.37	0.43	0.25	0.23	0.37	0.40

	Q141	Q142	Q143	Q144	Q145
Q141	1.00				
Q142	0.75	1.00			
Q143	0.35	0.44	1.00		
Q144	0.53	0.65	0.65	1.00	
Q145	0.48	0.65	0.43	0.54	1.00

Table 1. Item correlation matrix

ADDITIONAL RESULTS FOR THE SMALL-SCALE STUDY

- **Descriptive analysis**

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test Statistic	Sig.
LEAD	PRESP	6.11	2.29	0.950	0.007
	PLAN	4.94	2.39	0.949	0.006
	HEADSP	5.69	2.64	0.918	0.000
	QGOALS	5.03	2.41	0.920	0.000
	DAILY	5.24	2.74	0.929	0.001
CCDEL	EXPECT	5.71	2.03	0.943	0.003
	USEQI	5.37	2.38	0.943	0.003
ECS	FOCUS	6.10	2.34	0.957	0.018
	COMPLAIN	5.83	2.41	0.959	0.022
	VALUECR	5.83	2.21	0.958	0.020
	SATCOMP	4.50	2.22	0.933	0.001
ICS	WORK	6.23	2.19	0.949	0.007
	NEEDSAT	5.01	2.61	0.939	0.002
	ICIDEA	5.11	2.31	0.947	0.005
	INTERACT	5.34	2.51	0.938	0.002
MBF	PERFMES	5.44	2.24	0.947	0.005
	DISSEM	6.03	2.21	0.951	0.008
	USEMES	5.29	2.46	0.931	0.001
AWP	CRITID	5.19	1.72	0.935	0.001
	COORD	5.06	1.93	0.955	0.014
	DESIGNQ	5.03	2.24	0.946	0.005
	INNOV	5.10	2.15	0.950	0.008
	SUPPLIER	5.40	2.46	0.944	0.004
MEASURE	COMPACC	4.61	2.08	0.955	0.013
	CUSTMEAS	5.34	2.51	0.938	0.002
	ASSESS	4.63	2.11	0.950	0.007
PBM	HRMSUP	4.33	2.10	0.956	0.016
	RECRUIT	4.69	2.56	0.931	0.001
	FEEDBACK	4.10	2.27	0.935	0.001
	MEANSJP	4.41	2.41	0.923	0.000
	EMPPART	4.46	2.62	0.911	0.000
TEAM	ENCOUR	4.86	2.49	0.926	0.001
	CROSS	4.87	2.48	0.937	0.002
	LOCAL	5.27	2.62	0.940	0.002

PMQ	QTRMGRS	4.69	2.45	0.944	0.004
	QTRSTAFF	3.71	3.32	0.900	0.000
	RESOURCES	4.54	2.21	0.949	0.006
	REWARDS	4.13	2.47	0.921	0.000
	RISKENV	4.54	2.34	0.935	0.001
CI	RESPONS	5.77	2.30	0.963	0.035
	TOOLS	5.40	2.20	0.959	0.021
CIC	CICULT	5.66	2.01	0.944	0.004
	SUGGEST	4.56	2.45	0.949	0.007
	BENCH	5.14	2.47	0.949	0.006
PREVENT	FIRST	5.07	2.35	0.919	0.000
	ROOT	5.09	2.23	0.938	0.002
OE	GLACHIEVE	6.26	1.66	0.922	0.000
	IMAGE	6.13	2.11	0.945	0.004
	FINANCE	5.57	2.75	0.926	0.000
	DEMAND	6.26	2.14	0.948	0.006
	QUALIFE	7.33	1.91	0.935	0.001

Table 6. Basic statistics by measurement item (question)

- **Structural Model Results**

CONSTRUCT	INDEX
LEAD	48.5
CCD	50.2
ECS	51.8
ICS	45.2
MBF	51.4
AWP	46.2
MEAS	45.5
PBM	37.3
TEAM	42.9
PMQ	39.7
CI	51.7
CIC	48.4
PREV	45.3
OE	58.9

Table 7. Latent variable scores

ITEM	LEAD	CCD	ECS	ICS	MBF	AWP	MEASURE
PRESP	0.232407						
HEADSP	0.014497						
QGOALS	0.369756						
DAILY	0.474016						
EXPECT		0.457951					
USEQI		0.591816					
FOCUS			0.220104				
COMPLAIN			0.21745				
VALUECR			0.489357				
SATCOMP			0.184026				
WORK				-0.13274			
NEEDSAT				0.236269			
ICIDEA				0.376468			
INTERACT				0.550672			
PERFMEAS					0.562632		
DISSEM					0.387607		
USEMEAS					0.143304		
CRITID						0.570653	
DESIGNQ						0.375222	
SUPPLIER						0.155047	
COMPACC							0.378477
CUSTMEAS							0.725713

Table 8.A. Outer coefficients (I)

ITEM	PBM	TEAM	PMQ	CI	CIC	PREVENT	OE
HRMSUP	0.297621						
RECRUIT	0.16489						
FEEDBACK	0.310601						
EMPPART	0.325358						
ENCOUR		0.450778					
CROSS		0.579716					
QTRMGRS			0.264691				
RESOURCES			0.122982				
RISKENV			0.712134				
RESPONS				0.69224			
TOOLS				0.34077			
CICULT					0.501933		
SUGGEST					0.058402		
BENCH					0.504555		
FIRST						0.309009	
ROOT						0.734623	
GLACHIEVE							0.296668
IMAGE							0.268195
FINANCE							0.205574
DEMAND							0.231092
QUALIFE							0.217943

Table 8.B. Outer coefficients (II)

ITEM	LEAD	CCD	ECS	ICS	MBF	AWP	MEAS.	PBM	TEAM	PMQ	CI	CIC	PREV
LEAD													
CCD	0.67455												
ECS		0.835248											
ICS		0.810582											
MBF	0.784354												
AWP					0.806289								
MEASURE					0.832343								
PBM	0.750295												
TEAM								0.864574					
PMQ								0.84324					
CI	0.768475												
CIC											0.910902		
PREVENT											0.801064		
OE			0.470323	0.008684		0.000146	0.042721		0.008713	0.04075		0.073023	0.287463

Table 9. Inner coefficients

	LEAD	CCDEL	ECS	ICS	MBF	AWP	MEASURE	PBM	TEAM	PMQ	CI	CIC	PREV	OE
LEAD	1													
CCDEL	0.67	1												
ECS	0.82	0.83	1											
ICS	0.73	0.81	0.83	1										
MBF	0.78	0.72	0.84	0.79	1									
AWP	0.75	0.72	0.84	0.83	0.81	1								
MEASURE	0.74	0.78	0.81	0.95	0.83	0.86	1							
PBM	0.75	0.67	0.77	0.86	0.78	0.86	0.88	1						
TEAM	0.67	0.73	0.76	0.83	0.69	0.76	0.83	0.86	1					
PMQ	0.75	0.79	0.76	0.83	0.71	0.82	0.81	0.84	0.85	1				
CI	0.77	0.83	0.86	0.80	0.80	0.84	0.82	0.80	0.77	0.83	1			
CIC	0.71	0.75	0.83	0.73	0.78	0.80	0.77	0.77	0.75	0.78	0.91	1		
PREVENT	0.74	0.73	0.73	0.75	0.75	0.78	0.75	0.77	0.78	0.85	0.80	0.73	1	
OE	0.77	0.73	0.82	0.75	0.77	0.76	0.75	0.75	0.72	0.75	0.82	0.75	0.76	1

Table 10. Correlation matrix among latent variables

	Path	β	SD	t-statistic	Valid*
H1-A	LEAD ➜ CCDEL	0.6746	0.0902	7.4793	✓✓✓
H1-B	LEAD ➜ MBF	0.7844	0.0758	10.3499	✓✓✓
H1-C	LEAD ➜ PBM	0.7503	0.0808	9.2897	✓✓✓
H1-D	LEAD ➜ CI	0.7685	0.0782	9.8303	✓✓✓
H2–A	CCD ➜ ECS	0.8153	0.0672	12.4334	✓✓✓
H2-B	CCD ➜ ICS	0.8106	0.0715	11.3296	✓✓✓
H3-A	MBF ➜ AWP	0.8063	0.0723	11.1573	✓✓✓
H3-B	MBF ➜ MEASURE	0.8323	0.0677	12.2921	✓✓✓
H4-A	PBM ➜ TEAM	0.8646	0.0614	14.0831	✓✓✓
H4-B	PBM ➜ PMQ	0.8432	0.0657	12.8404	✓✓✓
H5-A	CI ➜ CIC	0.9109	0.0504	18.0699	✓✓✓
H5-B	CI ➜ PREVENT	0.8011	0.0731	10.9543	✓✓✓
H6	ECS ➜ OE	0.4703	0.1572	2.9925	✓✓✓
H7	ICS ➜ OE	0.0087	0.2548	0.0341	-
H8	AWP ➜ OE	0.0001	0.1675	0.0009	-
H9	MEASURE ➜ OE	0.0427	0.2572	0.1661	-
H10	TEAM ➜ OE	0.0087	0.1480	0.0589	-
H11	PMQ ➜ OE	0.0407	0.1751	0.2327	-
H12	CIC ➜ OE	0.0730	0.1391	0.5250	-
H13	PREVENT ➜ OE	0.2875	0.1344	2.1386	✓✓

* Validity of hypotheses. Significant at p-value (< 0.10 ✓), (< 0.05 ✓✓), (< 0.01 ✓✓✓)

Table 11. Validation of hypothesis testing

APPENDIX C

LEADERSHIP MEASUREMENT:

QUESTIONNAIRE

ADDITIONAL RESULTS FOR THE 85 MUNICIPALITIES

ADDITIONAL RESULTS FOR THE SMALL-SCALE STUDY

STRUCTURAL ANALYSIS FOR THE SEEKER'S APPROACH

LEADERSHIP EXCELLENCE QUESTIONNAIRE

Organisational Values

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders develop shared meanings and interpretations of reality										
• Leaders use the organisational principles to guide decision-making										
• Leaders put in place reinforcement systems that are consistent with organisational values and principles										

Vision

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders create a compelling vision of the future of the organisation										
• Leaders communicate the vision effectively										
• Leaders inspire confidence in vision										

Mission

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders identify the organisation's purpose										
• Leaders generate commitment among organisational members for the chosen purpose										

Strategy

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders develop policies and strategies consistent with the organisation's mission, vision and values										
• Leaders anticipate and guide change										
• Leaders monitor resources and organisational performance and use feedback to review strategies for customer satisfaction										

Key Issues

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders align the organisation's structure to support delivery of its policy and strategy										
• Leaders give subordinates authority to act and make decisions										
• Leaders communicate and build supportive relationships with peers and subordinates in order to motivate people										

Leadership Excellence

The extent to which: Very little → Very much

	1	2	3	4	5	6	7	8	9	10
• Leaders are accessible, actively listening and responding to people										
• Leaders promote discussion, feedback and involvement										
• Leaders encourage continuous improvement through innovation and continuous learning										
• Leaders identify best practices in leadership										

ADDITIONAL RESULTS FOR THE 85 MUNICIPALITIES

- **Item Correlation Analysis**

SEE Table 1 (page C6)

- **Structural Model Results**

OV	VISION	MISSION	STRATEGY	KI	LEX
65.9	69.3	71.1	65.6	64.1	69.8

Table 2. Latent variable scores

Item	OV	VISION	MISSION	STRAT	KI	LEX
SHARED	0.40604					
VALREINF	0.71338					
VISCHAL		0.12666				
VISCOM		0.42211				
VISTRUST		0.51485				
MIDENT			0.54245			
MCOMMIT			0.55298			
POLSTRAT				0.28139		
CHANGE				0.22870		
MONREV				0.56533		
ALIGNST					0.48666	
PARTNER					0.61688	
ACCESS						0.23755
INVOLVE						0.26702
CINOV						0.28005
BENCH						0.27838

Table 3. Outer coefficients

	OV	VISION	MISSION	STRAT	KI	LEX
OV	-	-	-	-	-	-
VISION	0.74	-	-	-	-	-
MISSION	0.75	-	-	-	-	-
STRAT	0.73	-	-	-	-	-
KI	0.64	-	-	-	-	-
LEX	-	0.06	0.13	0.27	0.46	-

Table 4. Inner coefficients

OV	**VISION**	**MISSION**	**STRATEGY**	**KI**	**LEX**
0.65	0.81	0.80	0.82	0.77	0.96

Table 5. Cronbach-alpha coefficients

	Q11	Q12	Q13	Q21	Q22	Q23	Q31	Q32	Q41	Q42	Q43	Q51	Q52	Q53	Q61	Q62	Q63	Q64
Q11	1	.595	.563	.618	.555	.543	.600	.559	.557	.559	.590	.585	.329	.500	.493	.527	.562	.616
Q12		1	.713	.554	.541	.641	.553	.663	.494	.552	.595	.414	.333	.460	.444	.534	.539	.623
Q13			1	.694	.624	.684	.594	.657	.606	.600	.634	.482	.412	.533	.471	.545	.645	.667
Q21				1	.820	.800	.664	.670	.761	.724	.765	.585	.473	.637	559	.586	.623	.693
Q22					1	.802	.692	735	.678	.700	.815	.521	.426	.629	.584	.671	.689	657
Q23						1	.665	.742	.715	.716	.709	.527	.475	.666	.550	.615	.667	.673
Q31							1	.667	.624	.623	.617	.534	.511	.594	.500	.570	.565	.589
Q32								1	.569	.671	.696	.498	.516	.619	.595	.657	.645	.676
Q41									1	.847	.739	.629	.452	.647	.563	.587	.710	.694
Q42										1	.791	.651	.468	.648	.623	.704	.773	.766
Q43											1	.694	.443	.648	.614	.670	.718	.748
Q51												1	.479	.637	.545	.573	.706	.686
Q52													1	.777	.446	.525	.561	.483
Q53														1	.665	.755	.751	.743
Q61															1	.875	.794	.808
Q62																1	.874	.847
Q63																	1	.873
Q64																		1

Table 1. Item correlation matrix

ADDITIONAL RESULTS FOR THE SMALL-SCALE STUDY

- **Descriptive Analysis**

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test	
				Statistic	Sig.
OVAL	SHARED	5.17	1.873	.930	.001
	VALBDM	6.03	2.577	.927	.001
	VALREINF	5.74	2.276	.935	.001
VISION	VISCHAL	6.59	2.130	.946	.005
	VISCOM	6.01	2.281	.965	.046
	VISTRUST	5.89	2.230	.941	.003
MISSION	MIDENT	6.64	2.057	.941	.003
	MCOMMIT	5.07	2.428	.938	.002
STRAT	POLSTRAT	6.01	2.300	.925	.000
	CHANGE	5.93	2.169	.929	.001
	MONREV	5.67	2.412	.900	.000
KI	ALIGNST	5.60	2.039	.941	.002
	EMPOWER	4.37	1.912	.963	.035
	PARTNER	4.66	2.340	.931	.001
LEX	ACCESS	5.86	2.492	.948	.006
	INVOLVE	5.06	2.219	.946	.005
	CINOV	5.21	2.277	.936	.002
	BENCH	6.01	2.488	.923	.000

Table 6. Basic statistics by measurement item (question)

Item	Leaders' Mean	Staff Mean	Mean difference
SHARED	6.67	5.17	1.50
VALBDM	8.33	6.03	2.30
VALREINF	7.33	5.74	1.59
VISCHAL	8.00	6.59	1.41
VISCOM	7.33	6.01	1.32
VISTRUST	7.67	5.89	1.78
MIDENT	7.67	6.64	1.03
MCOMMIT	7.67	5.07	2.60
POLSTRAT	7.33	6.01	1.32
CHANGE	7.67	5.93	1.74
MONREV	7.67	5.67	2.00
ALIGNST	8.00	5.60	2.40
EMPOWER	6.00	4.37	1.63
PARTNER	7.67	4.66	3.01
ACCESS	6.67	5.86	0.81
INVOLVE	6.67	5.06	1.61
CINOV	7.67	5.21	2.46
BENCH	8.00	6.01	1.99

Table 7. Item difference of means

- **Item Correlation Analysis**

  SEE Table 8

	Q11	Q12	Q13	Q21	Q22	Q23	Q31	Q32	Q41	Q42	Q43	Q51	Q52	Q53	Q61	Q62	Q63	Q64
Q11	1	.726	.742	.578	.498	.612	.633	.641	.585	.549	.661	.500	.553	.586	.689	.653	.623	600
Q12		1	.869	.523	.481	.513	.601	.697	.761	.605	.685	.609	.468	.660	.664	.639	.602	.597
Q13			1	.656	.559	.685	.636	.664	.721	.583	.673	.552	.492	.634	.653	.611	.623	.605
Q21				1	.804	.786	.700	.533	.652	.665	.616	.555	.462	.579	.674	.689	.688	.693
Q22					1	.787	.693	.578	.630	.665	.612	.637	.421	.645	.679	.747	.747	.718
Q23						1	.740	.588	.602	.583	.575	.430	.466	.534	.662	.634	.653	.588
Q31							1	.673	.623	.666	.700	.577	.454	.655	.843	.773	.765	.743
Q32								1	.664	.532	.702	.512	.650	.747	.696	.672	.658	.585
Q41									1	.782	.748	.737	.602	.739	.630	.724	.572	.694
Q42										1	.735	.665	.538	.703	.682	.669	.646	.739
Q43											1	.795	.561	.758	.698	.727	.781	.733
Q51												1	.503	.743	.673	.777	.693	.707
Q52													1	.703	.507	.623	.477	.495
Q53														1	.720	.774	.727	.673
Q61															1	.788	.756	.753
Q62																1	.806	.803
Q63																	1	.813
Q64																		1

Table 8. Item correlation matrix

- **Structural Model Results**

OV	VISION	MISSION	STRATEGY	KI	LEX
50.8	55.6	57.7	53.8	42.5	50.3

Table 9. Latent variable scores

Item	OV	VISION	MISSION	STRAT	KI	LEX
SHARED	0.33243					
VALREINF	0.7360					
VISCHAL		0.14506				
VISCOM		0.17675				
VISTRUST		0.73208				
MIDENT			0.76649			
MCOMMIT			0.30804			
POLSTRAT				0.4315		
CHANGE				0.15478		
MONREV				0.49942		
ALIGNST					0.26236	
EMPOWER					0.21482	
PARTNER					0.62784	
ACCESS						0.27549
INVOLVE						0.27476
CINOV						0.2798
BENCH						0.26087

Table 10. Outer coefficients

	OV	VISION	MISSION	STRAT	KI	LEX
OV	-	-	-	-	-	-
VISION	0.71	-	-	-	-	-
MISSION	0.73	-	-	-	-	-
STRAT	0.76	-	-	-	-	-
KI	0.68	-	-	-	-	-
LEX	-	0.14	0.45	0.11	0.31	-

Table 11. Inner coefficients

	1	2	3	4	Σ	Index
ORGANISATIONAL VALUES (SHARED, VALREINF)						
w_i (weight)	0.3234	0.7363			1.0597	
x_i (mean)	5.17	5.74				
w_i x_i	1.6720	4.2264			5.8984	
						50.8
VISION (VISCHAL, VISCOM, VISTRUST)						
w_i (weight)	0.1451	0.1768	0.7321		1.054	
x_i (mean)	6.59	6.01	5.89			
w_i x_i	0.9562	1.0626	4.3121		6.3309	
						55.6
MISSION (MIDENT, MCOMMIT)						
w_i (weight)	0.7665	0.3080			1.0745	
x_i (mean)	6.64	5.07				
w_i x_i	5.0896	1.5616			6.6512	
						57.7
STRATEGY (POLSTRAT, CHANGE, MONREV)						
w_i (weight)	0.4315	0.1548	0.4994		1.0857	
x_i (mean)	6.01	5.93	5.67			
w_i x_i	2.5933	0.9180	2.8316		6.3429	
						53.8
KEY ISSUES (ALIGNST, PARTNER)						
w_i (weight)	0.2624	0.2148	0.6278		1.105	
x_i (mean)	5.60	4.37	4.66			
w_i x_i	1.4694	0.9387	2.9255		5.3336	
						42.5
LEADERSHIP EXCELLENCE (ACCESS, INVOLVE, CINOV, BENCH)						
w_i (weight)	0.2755	0.2748	0.2798	0.2609	1.091	
x_i (mean)	5.86	5.06	5.21	6.01		
w_i x_i	1.6144	1.3905	1.4578	1.5680	6.0307	
						50.3

Table 12. Calculation Index Details

STRUCTURAL ANALYSIS FOR THE SEEKER'S APPROACH

OV	VISION	MISSION	STRATEGY	KI	LEX
59.1	63.7	64.3	60.7	54.4	61.0

Table 13. Latent variable scores

Item	OV	VISION	MISSION	STRAT	KI	LEX
SHARED	0.35766					
VALREINF	0.71629					
VISCHAL		0.13595				
VISCOM		0.22633				
VISTRUST		0.69145				
MIDENT			0.62881			
MCOMMIT			0.45366			
POLSTRAT				0.44208		
CHANGE				0.15193		
MONREV				0.48335		
ALIGNST					0.33325	
EMPOWER					0.12297	
PARTNER					0.62909	
ACCESS						0.25937
INVOLVE						0.26876
CINOV						0.27624
BENCH						0.26436

Table 14. Outer coefficients

	OV	VISION	MISSION	STRAT	KI	LEX
OV	-	-	-	-	-	-
VISION	0.76	-	-	-	-	-
MISSION	0.78	-	-	-	-	-
STRAT	0.77	-	-	-	-	-
KI	0.71	-	-	-	-	-
LEX	-	0.17	0.25	0.13	0.43	-

Table 15. Inner coefficients

APPENDIX D

BUSINESS SCORECARD:

CITIZENS' QUESTIONNAIRE

ADDITIONAL RESULTS FOR THE GENERAL SAMPLE

ADDITIONAL RESULTS FOR THREE MUNCIPALITIES

INQUÉRITO AO MUNÍCIPE

CITIZENS' QUESTIONNAIRE

No âmbito do Doutoramento que frequento na Universidade de Sheffield Hallam (Inglaterra) estou a realizar um projecto em torno da Gestão da Qualidade nas Autarquias Portuguesas.
O objectivo deste inquérito é o de conhecer o modo como avalia a Câmara num conjunto de aspectos considerados fundamentais para a gestão de um Município. De forma alguma se pretende com este inquérito avaliar individualmente cada Câmara Municipal, mas sim construir um modelo genérico.

Agradeço sinceramente o seu tempo e interesse.

Instruções: Nas questões seguintes assinale com uma cruz (X) a opção que melhor representar o nível com que concorda com cada uma das afirmações seguintes. Responda tendo em atenção os serviços que melhor conhece e/ou utiliza.

As part of my PhD in Sheffield Hallam (UK), I am conducting a research on Total Quality Management and Organisational Excellence in the Portuguese municipalities.
The purpose of this survey is to undrerstand how you evaluate the municipality in a set of critical success factors. The aim is to build and test a generic model and results will not be reported individually.

Thank you for your time and interest.

***Directions**: In all the following, please cross the appropriate box to indicate how you would rate the extent to which your institution practices TQM critical success factors and evaluates organisational excellence.*

Indique por favor o Concelho e Junta de Freguesia onde reside:
Please indicate the municipality you belong to:

_____

Princípios e Orientações / *Organisational Values*
Até que ponto/ *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• A Câmara comunica quais os seus propósitos, princípios e projectos *The municipality communicates what it stands for – its values, principles and main projects*										
• A Câmara desenvolve e implementa estratégias e políticas de acordo com os princípios e valores anunciados *The municipality develops and implements strategies and policies aligned with its values*										
• A Câmara cria um sentido de comunidade e identidade entre os munícipes *The municipality builds a sense of community surrounding the values*										

Processos / *Process Excellence*
Até que ponto/ *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• Os serviços municipais funcionam de acordo com o estabelecido e divulgado *Services run smoothly and in conformity with what is established*										
• Todos os departamentos e secções da Câmara trabalham em conjunto para melhorar a qualidade dos serviços *Every department and employee work as a team to improve the quality of the services provided*										
• A Câmara comunica e divulga com eficácia os resultados do seu desempenho e das actividades desenvolvidas *The municipality effectively communicates the results of its activities and disseminates a range of process performance indicators*										
• A Câmara está atenta aos projectos introduzidos noutros municípios e procura aprender com os melhores exemplos The municipality pays attention to the projects and activities carried out in other municipalities and benchmarks its processes against best competitors										

Inovação e Aprendizagem / *Organisational Learning*
Até que ponto/ *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• A Câmara aprende com os erros cometidos e tenta sistematicamente melhorar *The municipality learns with the mistakes and systematically tries to improve*										
• Os líderes e gestores da Câmara são acessíveis e ouvem os munícipes com atenção *Leaders are accessible, actively listening to citizens*										
• A Câmara está atenta a mudanças nas necessidades e preferências dos munícipes e tenta a elas dar resposta *The municipality Is responsive to changes in citizens' needs and demands*										
• A Câmara introduz regularmente novos serviços e/ou muda o funcionamento dos serviços que fornece para maior conveniência dos cidadãos/utentes *The municipality regularly introduces new services or changes delivery processes to enhance citizens' convenience*										

• A Câmara trabalha em colaboração com outras entidades (cidadãos, fornecedores, Governo, empresas, instituições de solidariedade social) para resolver os problemas do município *The municipality works in partnership with stakeholders (citizens, suppliers, companies, Government, voluntary sector) to solve the problems of the local authority*										

Satisfação dos Munícipes e Sociedade em Geral/ *Delight the Stakeholders*

Até que ponto/ *The extent to which:*

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• A Câmara procura conhecer as necessidades e preferências dos munícipes *The municipality is aware of citizens' needs and preferences*										
• A Câmara fornece informação relevante e fiável às partes interessadas (cidadãos, fornecedores, Governo, empresas) *The municipality provides relevant and reliable information to its stakeholders*										
• A Câmara lida eficazmente com reclamações e sugestões *The municipality encourages citizens' suggestions and effectively deals with complaints*										

Excelência / *Scorecard Excellence*

Até que ponto / *The extent to which*:

Pouco *Very little* → Muito *Very much*

	1	2	3	4	5	6	7	8	9	10
• A Câmara demonstra preocupação para com as necessidades de todos (munícipes, funcionários, fornecedores, Governo, empresas, instituições de solidariedade social) *The municipality cares about its stakeholders (citizens, employees, suppliers, companies, Government, voluntary sector)*										
• A Câmara aproveita correctamente os recursos (materiais e humanos) que tem à sua disposição oferecendo aos cidadãos serviços com uma boa relação qualidade/preço *The municipality makes use of the resources available and provides good value for money*										
• A Câmara tem uma boa situação financeira *The municipality has a healthy financial situation*										
• A Câmara tem uma boa imagem *The municipality has a good overall image*										
• A Câmara contribui para o desenvolvimento e melhoria da qualidade de vida da comunidade local *The municipality contributes to the development and quality-of-life of the local community*										

ADDITIONAL RESULTS FOR THE GENERAL SAMPLE

- **Item Correlation Analysis**

  SEE Table 1 (page D7)

- **Structural Model Results**

CONSTRUCT	INDEX
OVALUES	39.25
PROCESS	41.53
LEARNING	40.62
STAKEDEL	39.55
SCOREX	43.55

Table 2. Latent variable scores

Item	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
VALCOM	0.133725				
ALIGN	0.474944				
COMMUNITY	0.501068				
CONFORMITY		0.101236			
TEAMS		0.336443			
PERFCOM		0.143844			
BENCHMARK		0.567704			
CICULTURE			0.595563		
RESPONSIVE			0.281916		
INNOVATION			0.093129		
PARTNER			0.120870		
NEEDSAWARE				0.374176	
INFORM				0.674977	
CARE					0.274441
VFM					0.257197
FINANCE					0.122405
IMAGE					0.238056
DEVELOPMENT					0.264171

Table 3. Outer coefficients

	1	2	3	4	5	Σ	Index
ORGANISATIONAL VALUES							
w_i (weight)	0.133725	0.474944	0.501068			1.109737	
x_i (mean)	5.1385	4.6000	4.3077				
$w_i\ x_i$	0.68714	2.18474	2.15845			5.03033	
							39.2
PROCESS EXCELLENCE							
w_i (weight)	0.101236	0.336443	0.143844	0.567704		1.149227	
x_i (mean)	4.8615	4.4846	4.7846	4.8538			
$w_i\ x_i$	0.49216	1.50881	0.68824	2.75552		5.44473	
							41.5
ORGANISATIONAL LEARNING							
w_i (weight)	0.595563	0.281916	0.093129	0.12087		1.091478	
x_i (mean)	4.5385	4.6846	4.4538	5.3231			
$w_i\ x_i$	2.70296	1.32066	0.41478	0.64340		5.0818	
							40.6
DELIGHT THE STAKEHOLDERS							
w_i (weight)	0.374176	0.674977				1.049153	
x_i (mean)	4.5000	4.5923					
$w_i\ x_i$	1.68379	3.09970				4.78349	
							39.5
SCORECARD EXCELLENCE							
w_i (weight)	0.274441	0.257197	0.122405	0.238056	0.264171	1.15627	
x_i (mean)	4.6538	4.3769	5.0846	5.1692	5.4231		
$w_i\ x_i$	1.27719	1.12572	0.62238	1.23056	1.432626	5.688476	
							43.5

Table 4. Index calculation

	Q11	Q12	Q13	Q21	Q22	Q23	Q24	Q31	Q32	Q33	Q34	Q35	Q41	Q42	Q43	Q51	Q52	Q53	Q54	Q55
Q11	1	.737	.580	.564	.497	.603	.563	.557	.467	.570	.443	.453	.561	.640	.409	.507	.483	.213	.542	.590
Q12		1	.702	.635	.571	.624	.727	.694	.544	.687	.525	.583	.631	.711	.525	.648	.662	.290	.635	.690
Q13			1	.634	.547	.619	.727	.726	.463	.651	.658	.643	.685	.724	.641	.748	.665	.262	.607	.649
Q21				1	.689	.589	.638	.636	.541	.632	.553	.577	.654	.626	.599	.614	.585	.432	.594	.602
Q22					1	.617	.598	.668	.632	.610	.567	.584	.705	.624	.613	.667	.612	.217	.536	.614
Q23						1	.662	.576	.417	.543	.514	.554	.560	.641	.551	.645	.616	.197	.531	.597
Q24							1	.783	.580	.679	.666	.691	657	.699	.607	.715	.676	.371	.649	.716
Q31								1	702	.769	.691	.731	.755	.780	.714	.761	.703	.388	.663	.744
Q32									1	.722	.559	.539	.676	.642	.614	.596	.532	.332	.616	.617
Q33										1	.724	.710	.761	.732	.678	.795	.738	.414	.740	.743
Q34											1	.704	.676	.661	.639	.747	.670	.311	.602	.633
Q35												1	.659	.698	.643	.751	.757	.436	.652	.681
Q41													1	.801	.727	.817	.717	.271	.664	.714
Q42														1	.788	.754	.697	.316	.644	.726
Q43															1	.730	.675	.321	.607	.673
Q51																1	.855	.328	.707	.782
Q52																	1	.356	.674	.721
Q53																		1	525	.447
Q54																			1	.844
Q55																				1

Table 1. Item correlation matrix

ADDITIONAL RESULTS FOR THE THREE MUNICIPALITIES

- **Descriptive analysis**

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test Statistic	Sig.
OVALUES	VALCOM	5.94	2.061	.854	.000
	ALIGN	5.73	1.807	.894	.004
	COMMUNITY	5.52	1.955	.952	.157
PROCESS	CONFORMITY	5.09	2.199	.916	.014
	TEAMS	4.36	1.597	.841	.000
	PERFCOM	5.36	1.674	.918	.016
	BENCHMARK	5.58	1.521	.922	.021
LEARNING	CICULTURE	5.18	1.685	.901	.006
	LEADACCESS	5.64	1.711	.930	.036
	RESPONSIVE	6.15	1.679	.856	.000
	INNOVATION	5.97	2.007	.906	.007
	PARTNER	6.42	1.750	.887	.002
STAKEDEL	NEEDSAWARE	5.67	1.689	.886	.002
	INFORM	5.30	1.879	.941	.071
	SUGCOMPLAINT	5.42	2.278	.944	.087
SCOREX	CARE	5.54	2.093	.885	.002
	VFM	4.88	1.850	.935	.050
	FINANCE	4.67	2.521	.934	.045
	IMAGE	6.73	2.295	.820	.000
	DEVELOPMENT	6.85	2.002	.895	.004

Table 5A. Item statistics for Municipality B

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test Statistic	Sig.
OVALUES	VALCOM	3.79	1.881	.930	.000
	ALIGN	3.32	1.410	.921	.000
	COMMUNITY	3.34	1.816	.929	.000
PROCESS	CONFORMITY	4.17	1.773	.945	.001
	TEAMS	3.77	1.915	.935	.000
	PERFCOM	3.94	2.054	.947	.001
	BENCHMARK	3.72	1.783	.940	.001
LEARNING	CICULTURE	3.49	1.867	.932	.000
	LEADACCESS	3.40	1.883	.918	.000
	RESPONSIVE	3.51	1.690	.934	.000
	INNOVATION	3.56	1.696	.943	.001
	PARTNER	4.26	1.926	.955	.004
STAKEDEL	NEEDSAWARE	3.63	1.739	.937	.000
	INFORM	3.87	1.848	.947	.001
	SUGCOMPLAINT	3.38	1.651	.934	.000
SCOREX	CARE	3.61	1.768	.940	.001
	VFM	3.40	1.864	.914	.000
	FINANCE	4.41	1.749	.943	.001
	IMAGE	3.24	1.898	.893	.000
	DEVELOPMENT	3.91	1.702	.946	.001

Table 5B. Item statistics for Municipality X

Construct	Item	Mean	Std. Deviation	Shapiro-Wilk test Statistic	Sig.
OVALUES	VALCOM	3.68	1.856	.905	.001
	ALIGN	4.22	2.485	.896	.000
	COMMUNITY	4.44	2.549	.903	.001
PROCESS	CONFORMITY	4.64	2.097	.950	.035
	TEAMS	4.48	2.349	.917	.002
	PERFCOM	4.14	2.555	.900	.000
	BENCHMARK	5.04	2.424	.933	.008
LEARNING	CICULTURE	4.30	2.082	.940	.014
	LEADACCESS	4.56	2.492	.891	.000
	RESPONSIVE	4.50	2.102	.948	.028
	INNOVATION	4.84	2.074	.924	.003
	PARTNER	5.32	2.123	.888	.000
STAKEDEL	NEEDSAWARE	4.48	2.341	.907	.001
	INFORM	4.60	2.303	.919	.002
	SUGCOMPLAINT	4.40	2.523	.926	.004
SCOREX	CARE	4.98	2.272	.945	.021
	VFM	4.76	2.536	.906	.001
	FINANCE	6.26	2.174	.951	.037
	IMAGE	5.82	2.265	.914	.001
	DEVELOPMENT	5.84	2.765	.934	.008

Table 5C. Item statistics for Municipality Y

- **Structural Model Results - Municipality B**

CONSTRUCT	INDEX
OVALUES	52.87
PROCESS	47.40
LEARNING	49.20
STAKEDEL	50.36
SCOREX	53.35

Table 7. Latent variable scores

Item	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
VALCOM	0.152987				
ALIGN	0.885751				
CONFORMITY		0.148222			
TEAMS		0.226401			
PERFCOM		0.074982			
BENCHMARK		0.719095			
CICULTURE			0.721862		
LEADACCESS			0.236931		
RESPONSIVE			0.058464		
INNOVATION			0.158665		
NEEDSAWARE				0.587542	
INFORM				0.195862	
SUGCOMPLAINT				0.316787	
CARE					0.217446
VFM					0.206087
FINANCE					0.19668
IMAGE					0.258608
DEVELOPMENT					0.219012

Table 8. Outer coefficients

	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
OVALUES	1	0.8259	0.8548	0.8269	0.8617
PROCESS		1	0.8539	0.7685	0.8179
LEARNING			1	0.8673	0.8685
STAKEDEL				1	0.8774
SCOREX					1

Table 9. Correlation matrix among latent variables

CONSTRUCT	**CRONBACH-ALPHA**
OVALUES	0.8253
PROCESS	0.8629
LEARNING	0.8320
STAKEDEL	0.8867
SCOREX	0.9422

Table 10. Scales reliability

CONSTRUCT	**R-SQUARES**
PROCESS	0.6821
LEARNING	0.7307
STAKEDEL	0.6837
SCOREX	0.8310

Table 11. R-squares

- **Structural Model Results - Municipality X**

CONSTRUCT	INDEX
OVALUES	26.86
PROCESS	31.49
LEARNING	30.31
STAKEDEL	30.92
SCOREX	29.46

Table 12. Latent variable scores

Item	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
VALCOM	0.12949				
ALIGN	0.453172				
COMMUNITY	0.528491				
CONFORMITY		0.066027			
TEAMS		0.528866			
PERFCOM		0.316691			
BENCHMARK		0.253578			
CICULTURE			0.064765		
RESPONSIVE			0.454124		
INNOVATION			0.258579		
PARTNER			0.338548		
NEEDSAWARE				0.512167	
INFORM				0.562875	
CARE					0.311921
VFM					0.273215
FINANCE					0.15281
IMAGE					0.254432
DEVELOPMENT					0.23136

Table 13. Outer coefficients

	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
OVALUES	1	0.8064	0.7750	0.7712	0.7668
PROCESS		1	0.8391	0.7735	0.7825
LEARNING			1	0.8319	0.7927
STAKEDEL				1	0.8665
SCOREX					1

Table 14. Correlation matrix among latent variables

CONSTRUCT	**CRONBACH-ALPHA**
OVALUES	0.8441
PROCESS	0.8468
LEARNING	0.9120
STAKEDEL	0.8435
SCOREX	0.8459

Table 15. Scales reliability

CONSTRUCT	**R-SQUARES**
PROCESS	0.6535
LEARNING	0.6006
STAKEDEL	0.5947
SCOREX	0.7837

Table 16. R-squares

- **Structural Model Results - Municipality Y**

CONSTRUCT	INDEX
OVALUES	35.79
PROCESS	37.14
LEARNING	40.24
STAKEDEL	38.81
SCOREX	48.80

Table 17. Latent variable scores

Item	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
VALCOM	0.271913				
ALIGN	0.112973				
COMMUNITY	0.672232				
CONFORMITY		-0.0251			
TEAMS		0.404073			
PERFCOM		0.61957			
BENCHMARK		0.111339			
CICULTURE			0.382249		
RESPONSIVE			0.479065		
INNOVATION			0.060638		
PARTNER			0.198716		
NEEDSAWARE				0.903513	
INFORM				0.111908	
CARE					0.282467
VFM					0.297641
FINANCE					0.117488
IMAGE					0.220952
DEVELOPMENT					0.240543

Table 18. Outer coefficients

	OVALUES	PROCESS	LEARNING	STAKEDEL	SCOREX
OVALUES	1	0.8875	0.7919	0.7999	0.7970
PROCESS		1	0.8588	0.8151	0.8503
LEARNING			1	0.8963	0.9265
STAKEDEL				1	0.8614
SCOREX					1

Table 19. Correlation matrix among latent variables

CONSTRUCT	**CRONBACH-ALPHA**
OVALUES	0.9057
PROCESS	0.8753
LEARNING	0.9077
STAKEDEL	0.9167
SCOREX	0.8883

Table 20. Scales reliability

CONSTRUCT	**R-SQUARES**
PROCESS	0.7876
LEARNING	0.6274
STAKEDEL	0.6399
SCOREX	0.8722

Table 21. R-squares

- **Excellence Seeker's Approach**

			Original index	Target business scorecard index		
Critical success factor and scorecard excellence	**Unitary impact**	**Upper limit**	**BSI=53**	**60**	**70**	**80**
Organisational Values	0.376	80	53	53	60	80
Process Excellence	0.233	80	47	47	47	47
Org. Learning	0.257	80	49	49	49	60
Stakeholders Delight	0.475	80	50	65	80	80

Table 22. Revised Indices of Critical Success Factors and Scorecard Excellence (Municipality B)

			Original index	Target business scorecard index		
Critical success factor and scorecard excellence	**Unitary impact**	**Upper limit**	**BSI= 29**	**40**	**50**	**60**
Organisational Values	0.473	60	27	27	34	45
Process Excellence	0.240	60	31	31	31	31
Org. Learning	0.081	60	30	30	30	30
Stakeholders Delight	0.614	60	31	49*	60*	60*

Table 23. Revised Indices of Critical Success Factors and Scorecard Excellence (Municipality X)

			Original index	Target business scorecard index		
Critical success factor and scorecard excellence	**Unitary impact**	**Upper limit**	**BSI=49**	**60**	**70**	**80**
Organisational Values	0.524	80	36	36	36	45
Process Excellence	0.188	80	37	37	37	37
Org. Learning	0.662	80	40	57	67	80*
Stakeholders Delight	0.114	80	39	39	39	39

Table 24. Revised Indices of Critical Success Factors and Scorecard Excellence (Municipality Y)

APPENDIX E

K&W SOFTWARE - SUMMARY OF CHARACTERISTICS AND WORKINGS

K&W MANAGEMENT SOFTWARE

Overview

To estimate the parameters of the various structural models developed and tested in this research, K&W management software was used.

Based on the Partial Least Squares (PLS) method, the software calculates the scores obtained for each latent variable (or model criterion), as well as the path (or inner) coefficients associated with the various hypothesised relationships linking the model constructs. By a similar process, the outer coefficients relating each construct with the manifest variables used to measure it are also computed.

In line with the Structural Equation Modelling (SEM) approach (see Section 5.2), all the measurement and structural model parameters are estimated simultaneously.

Software requirements

K&W package runs in the Matlab (version 4.2 or higher) and requires the development of an associated Excel spreadsheet where raw data (from the completed questionnaires administered to measure OE) is entered. The K&W software takes this data, computes the statistics and posts them back to the spreadsheet.

Procedures necessary to run the programs and possible files' modifications

After installing the program in the Personal Computer, it is necessary to open the Matlab and provide the exact location of the K&W files by typing:

```
path(path,'<driver>\\<folder>');
```

The first time a particular model is to be estimated, a number of lines needs to be changed in order to make the program executable.

Essentially, this involves slightly modifying two M-files comprised in K&W software.

One of them describes the model to be estimated - specifying the number of constructs, number of indicators associated with each of them, number of constructs involved in each hypothesised relationship - and indicates the sample size and required rigour of the estimation process. It is also necessary to introduce in the program the name of the Excel spreadsheet (from where, as mentioned above, the software reads the raw data that comes from the questionnaires) and the exact location (cells) of the data input matrix.

The other file that needs to be customised to each model application indicates to the where in the associated spreadsheet the key estimation results (inner coefficients, outer coefficients, latent variable scores, Cronbach-alphas and R^2) are to be posted back.

Changes in the number of questions used, characteristics of the relations tested, or size of the samples will necessarily imply modifying the files described above accordingly.

Once the path has been specified and these adjustments have been made to fit the particular situation under consideration, it is sufficient to use the Matlab menus to run the M-file with the specification of the model to be estimated by clicking in

File

followed by

Run M-file

and then entering directly the name and location of the M-file to be run in the window provided or using the *Browser* option.

The file with the model description calls the statistical routines (other M-files existent within K&W software) necessary to perform all the calculations.

Providing that the model was properly specified and the program provided with the correct links to the Excel spreadsheet, K&W posts the key results – inner coefficients, outer coefficients, variable scores and R^2 – back to the associated Excel file. Additionally, a series of other results – correlation matrixes, standard deviations for each variable, t-values and some intermediate calculations – can be seen directly on the Matlab screen and printed, if necessary.

As it happened in this research, these outputs can then be (re)arranged in Tables and Graphics to facilitate the results analysis.