# 'A Systemic Governance Framework for Information Technology Outsourcing'

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# ABSTRACT

The IT outsourcing market has experienced staggering growth over recent years; however, evidence suggests that this IT outsourcing movement has been problematic. (Gartner (2002) estimated that 80% of IT Outsourcing deals failed to deliver their original anticipated business objectives). This thesis examines organisational outsourcing trends within a wider organisational context, for example the positioning of outsourcing within the ***'flexibility offensive'*** (Atkinson and Gregory (1986)). The focus then shifts to IT outsourcing and specifically how the IT outsourcing environment is governed.

This research programme utilises action research as the research method. This involves the adoption of the ***'4 moments of action research'*** (Carr and Kemmis (1986)) namely ***'planning'***, ***'acting'***, ***'observation'*** and ***'reflection'***. Soft Systems Methodology (SSM), initially developed by Checkland in 1969, is adopted as the theoretical framework. This framework enables the development, implementation and subsequent reflection on **'A Systemic Governance Framework for IT Outsourcing'**

When this research programme was initiated, Royal Mail was at the early stages of considering an IT outsourcing route. Royal Mail subsequently entered into a £1.5Billion (over a ten-year period) outsourcing deal in June 2003. Within my role as Royal Mail Head of Governance I had a unique opportunity to bridge the gap between theoretical / academic and practitioner perspectives and to provide a unique and original application or practical intervention within the Royal Mail IT outsourcing environment. This intervention has the objective of utilising an original **IT Governance Framework,** which is designed and applied as part of this research programme, as a practical toolkit within the Royal Mail IT outsourced environment. From a theoretical perspective, the use of SSM and systems thinking in developing a systemic governance framework for IT outsourcing represents an original approach which offers new insights into this area of research.

This thesis should be of significant interest to both academic and practitioner communities within the IT outsourcing and specifically IT governance fields. This research programme sheds new light on the conundrum of why IT outsourcing is expanding despite the apparently poor levels of benefits realisation. Further, the systemic IT Governance Framework, which is developed and implemented, emerges as a new and leading edge model of control which is capable of operating effectively within the Royal Mail highly complex and commercial IT outsourced environment.

# Acknowledgements

I wish to thank my doctorate programme research directors Professor Jim Bryant and Doctor John Kawalek for their support, direction and encouragement throughout the course of this research programme. Both Jim and John's boundless enthusiasm for my work and provision of different perspectives, have I believe, enabled a more balanced and considered thesis to be completed.

My gratitude also goes to the organisations who agreed to take part in this research programme in such a candid manner, with special thanks to Royal Mail who agreed to participate in the research programme action research process. This has enabled a unique and real world perspective to be achieved.

Final thanks are to my family. To my four daughters Kelly, Jodie, Lauren and Aaliyah who had to put up with Dad during the seemingly endless periods when he was 'busy in the study' and to my wife Sarah who provided me with unconditional support and encouragement throughout the course of this research programme.

# Confidentiality Statement

This thesis contains information of a highly commercial and contractually sensitive nature. The organisations who participated in this research programme only did so with the proviso that their engagement would be carried out in the strictest of commercial confidence and that their respective issues and comments would remain anonymous. To maintain this research anonymity and integrity some of the research outputs that follow are therefore a broad and generalised interpretation of the key research findings and proposals.

These generalised outputs are published on the understanding that the **highest possible level of commercial confidentiality** applies whilst recognising that this thesis forms an original contribution to knowledge within the IT Outsourcing and specifically IT Governance fields.

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# CHAPTER 1

# Research Positioning

## 1.1 Introduction - Background to the Research

IT Outsourcing represents a complex area of study and is an area where there are apparently contradictory views. The available literature provides strong evidence that IT Outsourcing business benefits realisation has been far from impressive. To illustrate this point research by Gartner (2002) estimated that ***'80% of IT Outsourcing deals failed to deliver their original anticipated business objectives'***. Further studies from Lacity and Willcocks (2001) concluded that ***'actual benefits from IT outsourcing are invariably less than those expected'***. Strassman (1995) used somewhat more alarmist language when his research and analysis argued that ***'IT Outsourcing is a game for losers'***. Various other studies have also argued that IT Outsourcing did not provide the anticipated business benefits realisation. Examples of these studies included the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001).

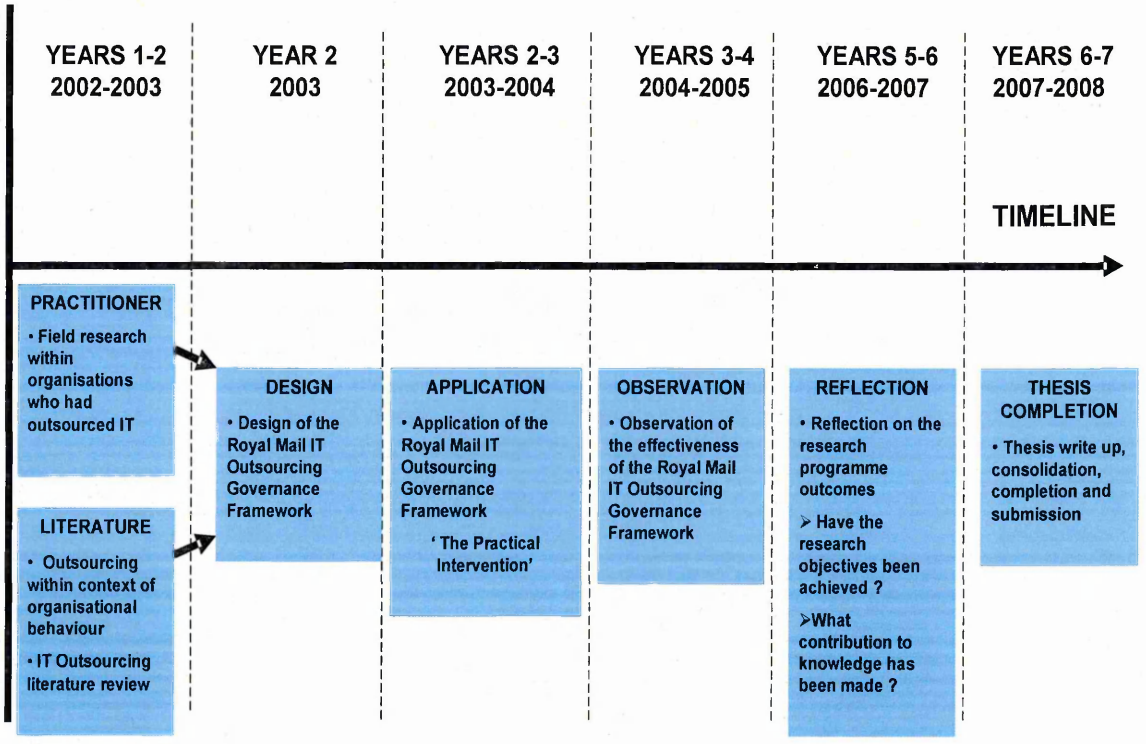
However, in the face of this evidence that IT outsourcing has been far from successful there has been a recent and rapid expansion of the IT Outsourcing market. Morgan Chambers (2007) estimated that the UK IT Outsourcing market has seen rapid expansion over recent years from £6 Billion per annum in 2000 to an anticipated level of £40 Billion per annum in 2010. Further, the global IT Outsourcing market has seen growth from $140 Billion per annum in 2001 to an estimated $350 Billion per annum in 2008 (International Data Corporation 2007). Evidently the IT Outsourcing business and practitioner communities were still proceeding with adopting an IT outsourcing approach despite the poor business benefits realisation warnings suggested by the various (primarily academic) sources.

This conundrum is a major driver for this research programme which has investigated the motivation for IT outsourcing under these conditions. This study has provided an insight of the IT outsourcing problem areas and has enabled the construction of theoretical frameworks and systems that have sought to provide intervention and improve governance within an IT outsourced environment. Therefore there is significant emphasis upon how the IT Outsourcing environment should be controlled or **governed**.

### 1.1.1 Royal Mail - The Research Context

This research programme addresses the IT outsourcing process within Royal Mail. The role of Royal Mail within the overall context of this research programme is summarised in the figure that follows:

**Figure 1.1 - The Research Programme Timeline**




The challenge I faced, as Royal Mail Head of Governance, at the start of this research programme was to ensure that an IT Governance Framework was designed and applied to enable a move from in sourced IT to a highly complex and commercial outsourced IT environment. This put me in a privileged position of being able to

provide a unique practical intervention within the Royal Mail real world IT outsourcing environment.

This research programme addresses the significant challenges Royal Mail faced in moving from internal IT service provision to a highly commercial and contractual IT outsourced environment. This was at a time when Royal Mail was facing major financial (Royal Mail was losing £1 Million per day at the time of considering IT outsourcing) and commercial pressures coupled with increased competition.

As Figure 1.1 shows, the design of the Royal Mail IT outsourcing governance framework is based on knowledge gained by carrying out field research within organisations that had previously outsourced their IT capability coupled with using knowledge from the available IT outsourcing literature. The design of the Royal Mail IT outsourcing governance framework lead to the application and practical intervention of the framework, and associated systems and processes, within the Royal Mail IT outsourced environment.

Following application of the IT Governance Framework an observation would take place with respect to how effective the framework is within the Royal Mail IT outsourced environment. There would then be a period of reflection to take stock of the research programme outcomes in terms of contribution to knowledge has been made and specifically what the research programme implications are for Royal Mail.

## 1.2 Organisational Context - Positioning of the Outsourcing Phenomenon within the Wider Business and Organisation Context

Although the overall aim of this research programme is to make a credible contribution to knowledge within the IT Outsourcing, IT management and specifically IT Governance fields, it is important to ensure that a holistic rather than reductionist research approach is adopted. Alvesson and Skoldberg (2002) stated:

***'The meaning of a part can only be understood if it is related to the whole'***

This chapter provides an understanding of the general outsourcing phenomenon within the overall context of organisational strategy and behaviour. This ensures that the platform for the specific issues of IT Outsourcing will be addressed. Houghton (1995) stated that outsourcing has been a long established element of business strategy and that ***'Outsourcing is a new name for an old practice'.*** Houghton cites examples of early outsourcing over the past 50 years in the areas of advertising, legal services, building maintenance and catering. The reasons cited for the early outsourcing activities are primarily that the outsource provider could provide the service better **or** cheaper (or in some cases better **and** cheaper).

In wishing to understand outsourcing within the ***'whole'*** context of organisational behaviour it could be argued that outsourcing may have been part of the move from a modern to a post modern epoch and part of a methodology for coping with an increasingly turbulent and uncertain environment. Clegg (1990) described the move towards post modern organisations, which ***'might be centered on a concern with flexible specialism'.*** Therefore outsourcing with its implications of moving from a fixed to variable cost, material and labour bases could represent an element of this ***'flexible specialism'***. The flexibility debate was further articulated by Horwitz (1990) who argued that economic and political crises have led organisations towards considering greater ***'flexibility'*** in the management of human, financial and material sources. This may have resulted in a move towards more decentralised organisational forms and a move away from the more centralised and bureaucratic organisations characterised by modernism.

The move away from the bureaucratic organisation to managing in a post modern epoch is classified by what was described by Wood (1989) as ***'new wave'*** management literature (examples include Peters and Waterman (1982), Peters (1987), Handy (1989) and Deal and Kennedy (1982). It could be argued that outsourcing may have assisted the drive towards a less bureaucratic organisation, not least because outsourcing of a service previously provided in house will reduce internal staff numbers, management layers and the amount of internal processes and procedures. To assist with the analysis of the shifting organisation paradigms the work of Jick, Kerr and Ulrich (1998), who described the ***'boundary less organisation',*** is detailed in the table that follows:

**Table 1.1 - The Boundary Less Organisation**

| **The Shifting Paradigm for Organisational Success** | |
|---|---|
| ***'Old Success Factors'*** | ***'New Success Factors'*** |
| • **Size** | • **Speed** |
| • **Role Clarity** | • **Flexibility** |
| • **Specialisation** | • **Integration** |
| • **Control** | • **Innovation** |

The criteria in the table are compared with the drivers towards, and benefits anticipated from, undertaking outsourcing. It is argued that the old success factors would be cast off implications of undertaking an outsourced arrangement. For example size of organisation would reduce, role clarity is of reduced importance, specialisation would be passed to the outsourcer (particularly in the case of any technology capability outsourcing) and control would no longer be an internal issue. It is also interesting to critically evaluate the four new success factors in the context of an outsourced arrangement. Outsourcing and levering expertise from the outsourced service provider may assist the first factor of speed in terms of access to market or

change in product. This may not be the case when considering outsourcing of a true non-core activity such as building maintenance, however, it may have relevance when considering outsourcing of a key business process such as Information Technology. The second new success factor is that of flexibility. This is one of the drivers cited for undertaking an outsourced arrangement (Morgan Chambers 2002) with the potential move from a fixed to variable cost, manufacturing and labour base proving an attractive incentive for organisations. The third success factor of integration was described by Jick, Kerr and Ulrich (1998) as:

***'Organisations that can shift directions quickly and flexibly having processes that carry concepts of change into the institutional bloodstream, disseminating new initiatives quickly, and mobilising the right resource to make things happen'***

Outsourcing is one way of mobilising the right level of resource to, as the quotation states, ***'make things happen'***. The final and fourth success factor is innovation. Recent trends (Morgan Chambers 2002) have shown an increasing willingness for organisations to tap into the external environment by outsourcing existing internal innovation capability or using external expert consultants and expertise. This strategy allows a more holistic and global approach to be utilised particularly when looking for new market and product opportunities through the use of innovative solutions. For impact it is useful to quote the example of General Motors when considering what a ***'boundary less organisation'*** might look like. General Motors was cited (Aalders 2001) to have about 80,000 suppliers and service providers. The scale and complexity of this sourcing arrangement may be difficult to comprehend however it is a strategy that ensures that competition is brought into all areas of General Motor's motor vehicle manufacturing capability.

When analysing outsourcing within the wider organizational context, it was useful to look at the empirical evidence regarding the organisational trend towards what has been termed the ***'flexibility offensive'*** (Atkinson and Gregory 1986). This trend is also articulated by for example, Nichols 1986 and Prowse 1990, who identified an organisational trend towards differentiating between what is ***'core'*** and what is ***'peripheral'***. The argument put forward was that flexible organisations have been created by the stable and permanent ***'core'*** organising, managing and controlling a

flexible and non permanent ***'peripheral'*** workforce. In the case of outsourcing it can be argued that outsourcing has assisted in creating the flexible or ***'peripheral'*** element of an organization. Streeck (1987) claimed that the move towards a ***'flexible'*** organisation has increased the ***'general capacity to re-organise in close response to fluctuations in their environment'***.

Mary Jo Hatch (1997), when discussing, the ***'flexible'*** post modern organisation, highlighted:

***' Predictions are that the future will find us occupying smaller, more decentralised, informal and flexible organisations that will be primarily service or information oriented and will use automated production strategies and computer based technology'***

Hatch highlighted the increasing importance of creating ***'flexible'*** organisations as well as the increased role of information and computer based technology within today's business and manufacturing environment. This serves as an excellent lead into the next section of this thesis which looks at the growth of organisations that are outsourcing their information and computer based technology.

The paragraphs that follow highlight a transitional trend from what have been described as the early outsourcing of non-core or non-critical services (i.e. building maintenance) towards outsourcing business critical computer based Information Technology capability which, according to Hatch (1997) and others such as Heydebrand (1989), Clegg (1990) and Kanter, Stein and Jick (1992), form the heart and lifeblood of many of today's organisations. It is argued that the move towards outsourcing of business critical activities such as Information Technology capability has made the ***'core controlling the periphery'*** issue of increased relevance and importance.

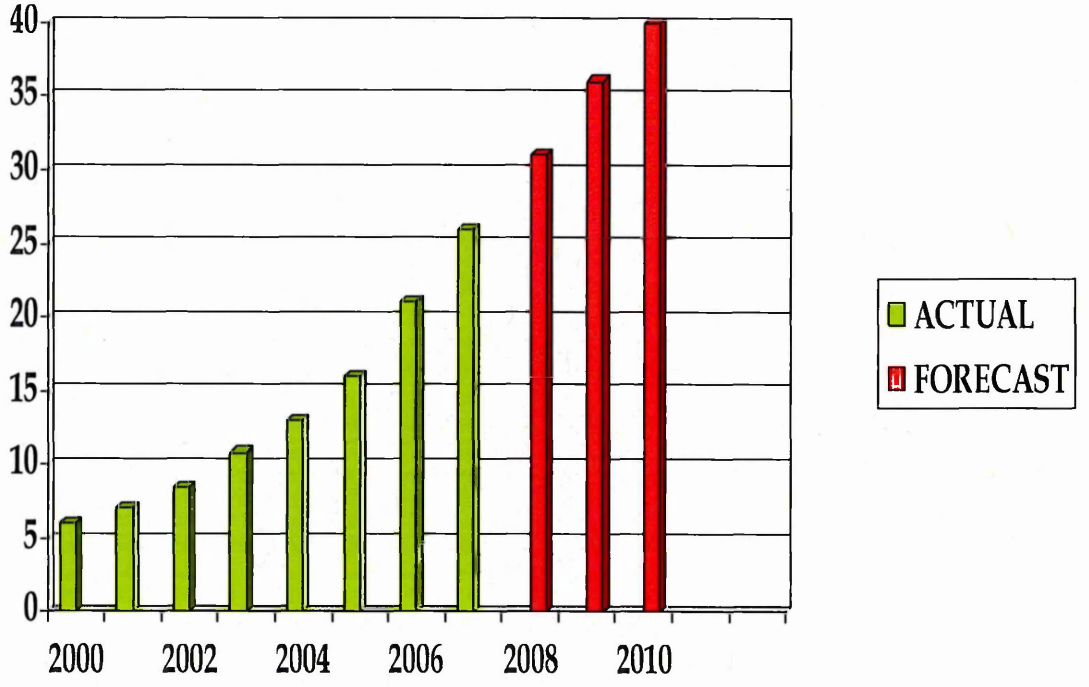
## 1.3 The Growth of Information Technology Outsourcing

The IT Outsourcing trend began in the USA when in 1990 Eastman Kodak announced that it was outsourcing its entire IT Function. Observers at the time may have wondered if outsourcing, which had been seen as a traditionally inherent in-house service, was just another passing management trend or fad. History has shown that IT Outsourcing has not been a passing management trend and other senior executives of the USA's major companies have been keen to follow Kodak's example and outsource their IT Functions. Examples include Continental Airlines, Continental Bank, Enron, First City, General Dynamics, Mc Donnel Douglas and Xerox (Lacity, Willcocks and Feeney (1995)).

As detailed earlier, global IT Outsourcing has continued to accelerate over recent times. The global IT outsourcing trend has expanded from the mega deals of the late eighties and throughout the nineties to mid-sized deals in more recent times (Outsourcing Institute - Mid-sized Companies Discover Outsourcing (2001)). Chief Information Officers and Executive Boards in the UK have been quick to seize on this apparent global best practice and organisations such as British Aerospace, BP Exploration, Inland Revenue and Philips Electronics have all followed suit and outsourced their IT capability (Willcocks and Fitzgerald (1994)). This despite the well documented warnings of surrendering direct management control of what can be deemed a ***'critical strategic asset'*** (Bergstrom (1991), Buck-Lew (1992) and Ganz (1990)).

The following figure produced by Morgan Chambers (2007), who are Europe's largest specialist outsourcing consultancy, summarises the recent growth in the UK's IT outsourcing market.

**Figure 1.2 - UK Outsourcing Market Size**




**UK IT Outsourcing Market Size**
**£ Billion per Annum**
**Source - Morgan Chambers (2007)**

The figure details that the UK IT Outsourcing Market has expanded from an approximate level of £6.0 Billion per annum in 2000 to an anticipated level of £40 Billion per annum in 2010. This represents a significant growth rate, which is exaggerated by the fact that the Global Business and IT Markets have been far from buoyant over the duration of this period. The failure of many of the dot.com businesses in 2001 is one example of the difficulties the IT industry had endured during this period.

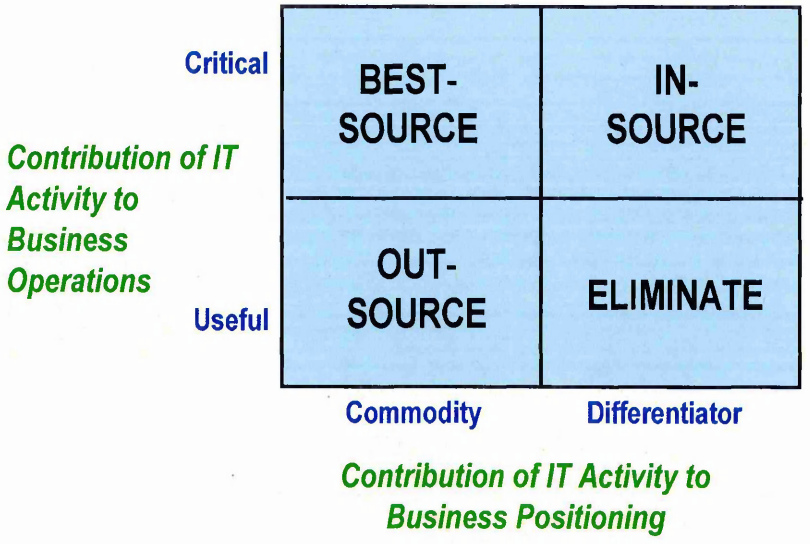
### 1.4 The Drivers Behind Information Technology Outsourcing

Morgan Chambers (2001) found that the major reasons (37%) why companies outsource are predominantly to make cost savings on their IT budgets and expenditure Other key reasons for outsourcing were cited by Morgan Chambers as being to improve quality of IT Service and to use IT Outsourcing as a change enabler (for example IT outsourcing could be part of a business transformation programme). Lacity and Willcocks (2001) cited two phenomena that may have led many senior executives to be attracted to IT outsourcing. The first is a desire to refocus on core competencies and the second is the issue that IT is perceived by many senior executives to be a significant cost burden and drain on an organisation's finances.

With financial savings being a prime driver for IT outsourcing, a report prepared by the National Audit Office (March 1996 ref HC255) may well have helped to fuel the fire of the IT Outsourcing phenomenon. This report provided a case study of the IT Outsourcing carried out within the Department of Social Security and provided data suggesting that over 30% of IT Budget could be saved by outsourcing their IT capability. There is a health warning on this information source as no follow up report was prepared confirming if these savings had been achieved. However, at the time it proved a catalyst for other government departments to follow suit (examples include the Home Office and The Department of Work and Pensions)

It is useful to analyse the business drivers behind the decision to outsource IT capability. Lacity and Willcocks (2001) argued that in order for IT to be outsourced to achieve business advantage two factors must be considered. First the contribution that an IT activity makes to business operations and second the impact of IT on the businesses competitive positioning. This is shown in the business factors matrix figure that follows:

**Figure 1.3 - Selective IT Outsourcing - The Business Factors Matrix**




**Source- Lacity and Willcocks (2001)**

The model highlights the recent IT Outsourcing trend which has seen a move away from a single IT Outsourcing contract towards selective sourcing. Note that selective sourcing comprises of a combination of sourcing options as shown in the 4 segments of the business factors matrix and represent the sourcing model that 73% of organisations adopt (1999 - 2000 study by Lacity and Willcocks). The four sourcing options are summarised as follows:

***'Critical Differentiators'*** - These are IT activities that are not only critical to business operations, but also help to distinguish the business from its competitors. The recommended sourcing option is to ***'In Source'***

***'Critical Commodities'*** - These are IT activities which are critical to business operations but fail to distinguish the business from its competitors. The recommended sourcing option is to ***'Best Source'***

***'Useful Commodities'*** - These are IT activities that provide incremental benefits to the business but fail to distinguish it from its competitors. The recommended sourcing option is to ***'Outsource'***

***'Useful Differentiators'*** - These are IT activities that differentiate the business from its competitors, but in a way that is not critical to business success. The sourcing option is to ***'Eliminate'***

The move away from a single supplier to a new breed of complex selective sourcing or what Lacity and Willcocks (2001) have also termed ***'Multi - sourcing'*** is summarised below:

***'Newly signed mega-deals are rarely based on fixed-price, long term, exchange based relationships with a single supplier. Instead, customers are seeking to avoid these pitfalls through value-added outsourcing, equity deals, multi-sourcing, co-sourcing and creative contracting'***

The move from single supplier multi sourcing contracts to multi sourcing made the ***'core'*** controlling the ***'periphery'*** debate explored earlier in this thesis more important and relevant. Because cost reduction is a prime motivator for IT Outsourcing (Morgan Chambers 2001), it is not difficult to see why multi sourcing had increased in popularity. Multi sourcing may offer an opportunity to drive down costs by tapping into all areas of specialism within the global IT market and take advantage of economies of scale that these specialist IT suppliers can offer. A single supplier would also have to sub contract areas of specialism, therefore, carrying out a multi sourcing strategy may offer an opportunity to cut out the middle man. There are however consequences of adopting a multi sourcing strategy. IT is for many organisations a core business process which is notoriously difficult to manage and integrate with business strategy. By using an IT multi sourcing strategy organisations may be faced with managing and ***'controlling'*** a myriad of complex contracts whilst ensuring that business operations were unaffected and benefits from the multi sourcing contract were achieved.

The ***'control'*** (or lack of control) issues were not just limited to the management of external IT contracts. Coombs, Knights and Wilmott (1992) highlighted the importance of IT with respect to internal management practices. They argued that IT is a means to direct ***'thought and action'*** in organisations and that ***'IT is a controlling mechanism to ensure that the senior management's desires and expectations are understood and implemented'***. It was interesting to note that senior managers were ready to put IT, which is regarded as their ***'controlling mechanism'***, in the hands of external IT service providers. There may be a risk with this sourcing strategy of losing internal control and influence. However, the undoubted growth and momentum of the IT outsourcing market is an indicator that that the potential rewards of IT outsourcing outweighed the risks.

## 1.5 Justification for the Research - The Problems with Information Technology Outsourcing

Having highlighted the rapid growth of IT Outsourcing it is interesting, and somewhat disturbing, to note the views of Lacity and Willcocks (2001):

***'Actual benefits from IT outsourcing are invariably less that those expected'***

To support this view Strassman (1995) published a paper entitled ***'Outsourcing - A Game for Losers'***. This paper contained an analysis of the IT outsourcing deals which took place during the early to mid 1990's. Some of the outsourcing deals analysed included Eastman Kodak, Mc Donnel Douglas, US Air, Polaroid and Xerox. The results of Strassman's study are summarised by the following quotation;

***' Those corporations which outsourced heavily were economic losers heading into the outsourcing act. They were shedding IT along with other corporate functions because they were in financial trouble. I could not find any corporation with a consistently large Economic Value Added ( profit after tax) and rising employment, which outsourced, despite all the claims about 'synergy' or 'advantages' of getting rid of commodity work. The losers were casting off IT because they were already shrinking their firm'***

When Royal Mail outsourced its IT capability it was losing £1.0 Million per day. It could be argued that Royal Mail was in the ***'financial trouble'*** that Strassman referred. Also at the time of outsourcing Royal Mail was undergoing a significant downsizing exercise, or this could be termed the ***'shrinking'*** again to which Strassman referred.

To cast further doubt on the effectiveness of IT Outsourcing, Gartner Dataquest (2002) carried out research into over 400 outsourcing deals. The general conclusion from the research undertaken was that:

***'Gartner estimate that* 80% of *outsourcing deals fail to deliver their original business objectives, and are either terminated or significantly restructured before the end of the original contract period'***

The costs for organisations of restructuring or terminating IT outsourcing contracts were deemed by Gartner (2002) to be expensive both ***'financially and emotionally'***.

A reason for outsourcing IT capability was to achieve cost savings (Morgan Chambers 2001). Research carried out by Lacity and Willcocks (2001) found that out of 600 outsourcing deals only approximately half claimed to have realised some cost savings. This research had however been carried out in a largely quantitative manner and did not get to the issues of why cost savings benefits realisation had been so poor.

To support the view that cost savings have not been achieved by IT Outsourcing, SOCITM (A government agency) undertook a significant IT Outsourcing study in 2001 within 49 local authorities across the UK. One of the key findings was that the authorities who had outsourced their IT capability had an annual IT spend per user of **25% more** than the authorities who had not outsourced their IT capability. This report used a quantitative approach and no information was published as to why the anticipated cost savings had not been achieved.

Various other studies including the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and

McDowall (2001) have argued that IT outsourcing has not realised the anticipated benefits.

Therefore this chapter has highlighted that IT Outsourcing is a complex and problematic area where a fascinating conundrum and apparent opposing forces exist. The conundrum, and therefore opposing forces, being the strong evidence that the IT Outsourcing market is set to continue its rapid expansion despite equally strong evidence that the realised benefits of IT outsourcing has been far from impressive. To add to the IT Outsourcing conundrum, it is unclear on how to enter into a successful IT outsourcing arrangement and in particular how an IT outsourcing relationship can be effectively managed, controlled and ***'governed'*** to ensure that benefits realisation is achieved. Inadequate governance may have resulted in a ***'loss of control'*** over the IT outsourcing environment (highlighted in the work of Farrell (1999), Gallivan and Wonseak (2004) Willcocks, Fitzgerald and Lacity (1996), Grover Cheon and Teng (1994) and Gordon (1994). The addressing of the governance and ***'control'*** issues formed a key aspect of this research programme.

## 1.6 The Research Programme Objectives

This research programme has the objectives of addressing both academic and practitioner perspectives. These differing perspectives are summarised by the work of Pettigrew (1995, 2001) who drew attention to the need for researchers to clear ***'double hurdles'*** which are ***'simultaneously delivering practitioner relevance and scholarly excellence'.***

The theoretical (or academic) objectives of this research programme are detailed below:

- Examine the use of action research as the research method coupled with using a systems approach as the theoretical framework to provide a unique approach to address the problematic nature of the IT outsourcing phenomenon

- Evaluate IT outsourcing within the wider context of organisational behaviour. For example an objective is to position IT outsourcing within the ***'core controlling the periphery'*** debate ( Nicholls (1986) and Prowse (1990))

- Provide further insights into the current (and indeed future) trends of the IT Outsourcing phenomenon. This is an opportunity to provide views on new and emerging IT outsourcing models

- Develop, from basic principles, original and leading edge systems derived constructs with the end product being the development and application of an original **IT Governance Framework.** This framework represents a new model of control and adds to the current academic views on this subject area (for example the work of Otley and Berry (1980))

- Because this research programme takes place over a period of 7 years there is a unique opportunity to carry out research over the full extent of the IT outsourcing lifecycle. Therefore the research is able to provide an end to end and holistic view across the key stages of the IT outsourcing lifecycle as defined by Aalders (2001), namely Pre- IT Outsourcing, IT Contract negotiation and agreement, IT outsourcing transition period and Post IT outsourcing study

The practitioner objectives of the research programme can be summarised as follows:

- To ensure that the IT Governance Framework is practically applied within the Royal Mail IT outsourcing environment. This practical intervention provides a unique opportunity to underpin my research programme actions in practice as well as to bridge the gap between theoretical / academic and practitioner perspectives

- Physical relationships and interfaces are developed and implemented with the objective of bringing to life the IT Governance Framework processes and systems

- A number of IT Outsourcing contract principles are developed and implemented within a practical and real world environment

- This research programme seeks to build upon the relatively new Mode 2 research concept. Mode 2 being defined by MacLean , MacIntosh and Grant (2002) as:

***'Research carried out in the context of application'***

- This research approach should enhance the practical and practitioner nature of the research which is a key focus of the Doctorate in Business Administration research programmes. The Sheffield Hallam University Doctorate in Administration 2001 brochure states:

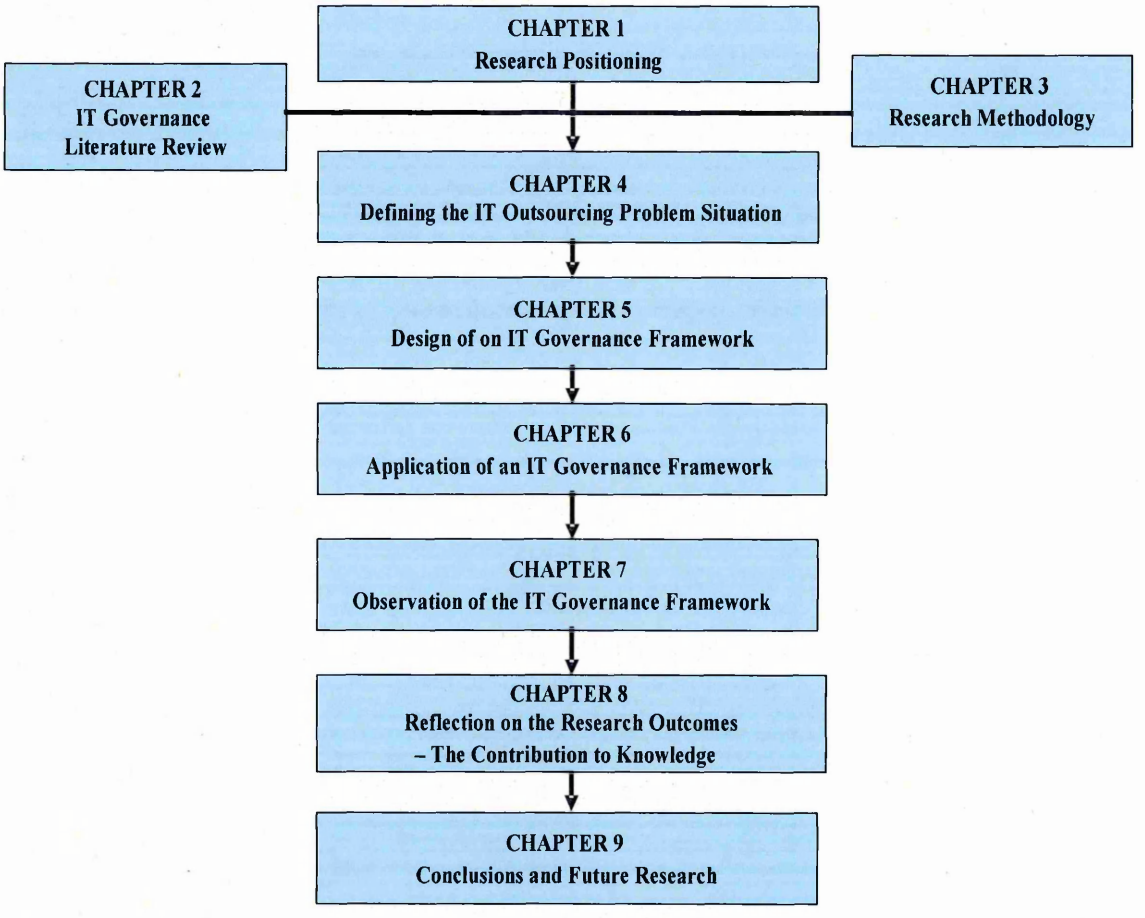
***'The Doctorate in Business Administration (DBA) is aimed at those who want to make a difference to the way that management will be practised in the future'***

To summarise, the objectives of this research programme are to provide both theoretical and practitioner insights and perspectives into the IT outsourcing phenomenon and specifically, how an IT outsourcing environment is controlled and **governed**. This research programme provides a unique and invaluable opportunity to intervene and test the theoretical frameworks and systems within a real world practical environment.

## 1.7 Outline of the Thesis

This thesis is organised into nine chapters. A diagrammatic outline of the research process is presented in the figure below which details the links between the chapters:

**Figure 1.4 - The Research Process**




The figure details the research positioning chapter, followed by two chapters dealing with the IT Governance literature review and the research methodology. Chapters 2 and 3 provide the research context and methodology which enabled Chapter 4, which

defined the IT outsourcing problem situation, to be constructed. This leads to the design (Chapter 5) and then application or practical intervention (Chapter 6) of an IT Governance Framework within the Royal Mail IT outsourced environment.

The next stage of the research programme is to carry out an observation of the IT Governance Framework (Chapter 7) followed by a reflection on the research outcomes and what contribution to knowledge had been forthcoming (Chapter 8). Finally, Chapter 9 provides conclusions of the research programme along with suggestions for future research and direction.

# CHAPTER 2

# IT Governance Literature Review

## 2.1 Information Technology Governance

The previous chapter positioned IT outsourcing within the wider organisational and business context. This chapter examines the specific literature and issues relating to how the IT outsourcing environment is ***'governed'***:

***'The idea of IT Governance has come about as a way of imposing order on chaos'***
Thomas (2005)

The concept of IT Governance has evolved following the widely reported collapse or ***'chaos'*** associated with Enron in 2000, this coupled with the problems associated with Arthur Anderson and Worldcom in the early 2000's, where the duties and responsibilities of the boards of directors for public and privately held corporations were seriously questioned. As a response to these issues, and to prevent any reoccurrence, the US Sarbanes - Oxley Act (2002) and European Union Basel II (2006) Acts were introduced. These Acts, along with the IT industry acknowledgement that complex IT projects can easily get out of control, have proved to be a catalyst for the further development of IT governance which had an objective of imposing ***'order'*** over the IT environment.

Because the IT Governance phenomenon is relatively new (particularly IT Governance within an IT outsourced environment) it is expected that this research programme will shed new light and thinking on how to ***'govern'*** an IT outsourced environment. This research programme also provides a unique opportunity to apply the IT Governance systems and models, developed later in this thesis, within the real world of the Royal Mail IT Outsourced environment.

The widely used industry definition for IT Governance is used by the Control Objectives for IT (COBIT) standard, which is issued by the IT Governance institute (2004) ( www.itgi.org.uk):

*'IT Governance is a structure of relationships and processes (1) to direct and control (2) the enterprise in order to achieve the enterprise's goals (3) by adding value (4) while balancing risks (5) versus return over IT and its processes'*

Various IT Governance definitions exist, however they all have common themes which are numbered **1-5** within the IT Governance Institute definition detailed below:

1. **Relationships and Processes** - these should exist to ensure that the IT governance processes are directed and controlled

2. **IT Control** - IT should operate within a ***'controlled'*** environment

3. **Enterprises Goals** - IT should be aligned with the enterprise's strategy and goals

4. **IT Value** - IT should add value

5. **IT Risks** - IT risks should be managed to ensure an adequate balancing of return on IT processes and investment

These 5 key governance requirements are used as the basis for the future IT governance literature review and analysis.

### 2.1.1 Relationships and Processes

Following any IT outsourcing arrangement it is necessary to retain an IT organisation in house which is capable of providing appropriate and effective relationship interfaces with the IT service providers. These relationships are the practical mechanisms that ensure that the IT governance processes are brought to life within the context of the overall IT outsourcing relationships. Lacity and Willcocks (2001) articulated the four ***'faces'*** or tasks of the emerging IT relationship functions in a post outsourced environment as follows:

- ***'The business face'*** - concerned with the elicitation and delivery of business requirements
- ***'The technical face'*** - this ensures that the organisation has access to the technical capability that it needs
- ***'The governance face'*** - concerned with information management strategy which defines the governance and coordination of the organisation's IT activity
- ***'The supply face'*** - this encompasses the understanding and use of IT services

Lacity and Willcocks provided a theoretical insight with respect to what ***'faces'*** should exist within the relationships and interfaces of a retained IT organisation. They had however, not provided information on how these ***'faces'*** will practically operate within the coalface of the relationship between the customer and IT service provider organisations. This research enables a practical perspective to be achieved and also to critically evaluate my own research findings against those of Lacity and Willcocks.

It is argued that ***'trust'***, a basic concept of ***'social exchange'*** theory, is one of the most desired qualities in any close relationship (Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999) and Klepper (1994)). Further McKeen and Smith (2001) argued that ***'The degree of alignment between any two parties usually plays a key role in the conduct of the eventual***

***relationship'.*** It is argued that this ***'degree of alignment'*** between a customer and IT service provider may be broadly determined by a list of basic relationship questions that McKeen and Smith (2001) have suggested as follows:

***'Do they understand your business?***
***Do they have the same priorities?***
***Do they understand the 'non specified' issues?***
***Do they have the urgency?***
***Do they anticipate what you need?***
***Do they care for your budgetary constraints?'***

These questions relate to what McKeen and Smith term the ***'level of intimacy'*** between the customer and IT service provider. It is argued that achieving a ***'level of intimacy'*** will provide an opportunity to build ***'trust'*** into a relationship. This research programme enables a first hand understanding and insight of how relationships operated within a real world practical environment. It also enables comparisons to be drawn against some of the theoretical relationship perspectives that existed. First hand knowledge is gained on how (or if?) a ***'level of intimacy'*** and ***'trust'*** is developed within the context of the IT outsourcing relationships that were examined. This research programme is able to test the theory of, for example, Kim and Lee (2003) that:

***'Relationships based on formal contract and rooted in mutual trust give rise to stronger bonds between clients and their service providers'***

The literature review highlights the importance of having effective IT outsourcing change management mechanisms in place, for example the work of Farrell (2002) and Morgan Chambers (2002) who stated that:

***'IT outsourcing is one continuous change process from the very outset of the concept to the final contract termination or renewal and beyond'***

Therefore this research programme ascertains, first hand, the change mechanisms that are in place within an IT outsourcing environment and obtains views on how effective these are with the objective of developing new perspectives and thinking.

Lacity and Willcocks (2001) recognised the importance of capabilities and skills and professionalism in creating effective relationships and therefore competitive advantage within the context of an IT outsourcing environment. They identified 9 areas of key skills and professionalism as follows:

1. ***'IS/IT Governance'*** - Establishing and maintaining the orientation and vision of the customer /IT service provider relationship
2. ***'Business Systems Thinking'*** - Contributes to the overall development of business strategy and identifies IT interdependencies
3. ***'Business/IT Relationship Building'*** - Develops business understanding of potential of IT
4. ***'Designing Technical Architecture'*** - Analysis of trends in development of a range of technologies
5. ***'Making Technology Work'*** - Focuses on action and problem solving aspects of successful IT delivery
6. ***'Informed Buying of IT Service'*** - Monitors available services of external IT supplier(s)
7. ***'Contract Facilitation'*** - Facilitate and manage people and contractual relationships
8. ***'Contract Monitoring'*** - Monitor results against goals
9. ***'Vendor Development'*** - Identifies opportunities for added value to business and vendor

These identified areas of skills and professionalism requirements are tested within the context of this research programme and, by doing this, new theory and concepts will emerge.

### 2.1.2 IT Control

In discussing the role of IT Governance, Sherer (2004) provided the following definition:

***'IT Governance is the system of structures and processes for directing and controlling Information Systems'***

The importance of directing (or managing) and controlling within the context of structures and processes which form an overarching IT Governance framework is highlighted by Sherer. However the work of Farrell (1999) cast doubt over how successfully organisations are able to ***'control',*** and therefore govern, their respective IT outsourced environments:

***'In many organisations wholesale IT outsourcing has been the norm – handing over the entire range of technology problems to someone else. Unfortunately they have found after about six to nine months that the problems haven't gone away but what little control they had over them certainly has'***

Gallivan and Wonseak (2004) also provided a warning with respect to a ***'loss of control'*** which may be related to the size (and complexity) of the IT outsourcing arrangement:

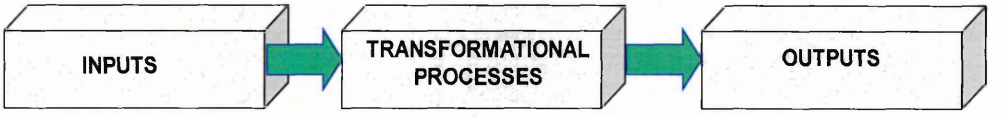
***'As the size of the contract increases , the client tends to lose control over its internal resources and becomes more dependent on it's vendor'***

The ***'loss of control'*** issue was supported by other research, including the work of Willcocks, Fitzgerald and Lacity (1996), Grover Cheon and Teng (1994) and Gordon (1994). It is therefore important from both academic and practitioner perspectives that consideration is given to appropriate control mechanisms within the design of any IT Governance processes or systems.

In order to understand more about these control mechanisms, a starting point for further exploration is the work of Otley and Berry (1980). Otley and Berry argued that

their model provides a grounding to begin analysis using a ***'systems based'*** model to represent whatever it is that is being ***'controlled'***. This systems based model was termed ***'A basic output based administrative control system'*** and is detailed in the figure that follows:

**Figure 2.1 - An Output Based Administrative Control System**




*Adapted from Otley and Berry (1980 )*

This output based administration control system demonstrates how various resources or inputs are combined together and subsequently changed to create the various outcomes or outputs. Otley and Berry argued that in order for an activity or system to be controlled at least **four** necessary conditions must exist:

***1.0 'Objectives must exist'*** - Without these the activity being controlled is without purpose and has no meaning

*2.0 'Activities outputs must be measured'* - This allows the assessment of the extent to which the activity is attaining the objectives defined

*3.0 'Causes of non attainment of objectives must be determined / monitored'* - This enables the identification of any non-attainment of objectives to be determined and the effects of any possible actions to correct the situation to be forecasted and evaluated

*4.0 'Capacity to take action relating to non attainment of objectives'* - There must be some capacity for taking action so that deviations in attainment (outputs), relative to the objectives set for the activity, can be reduced

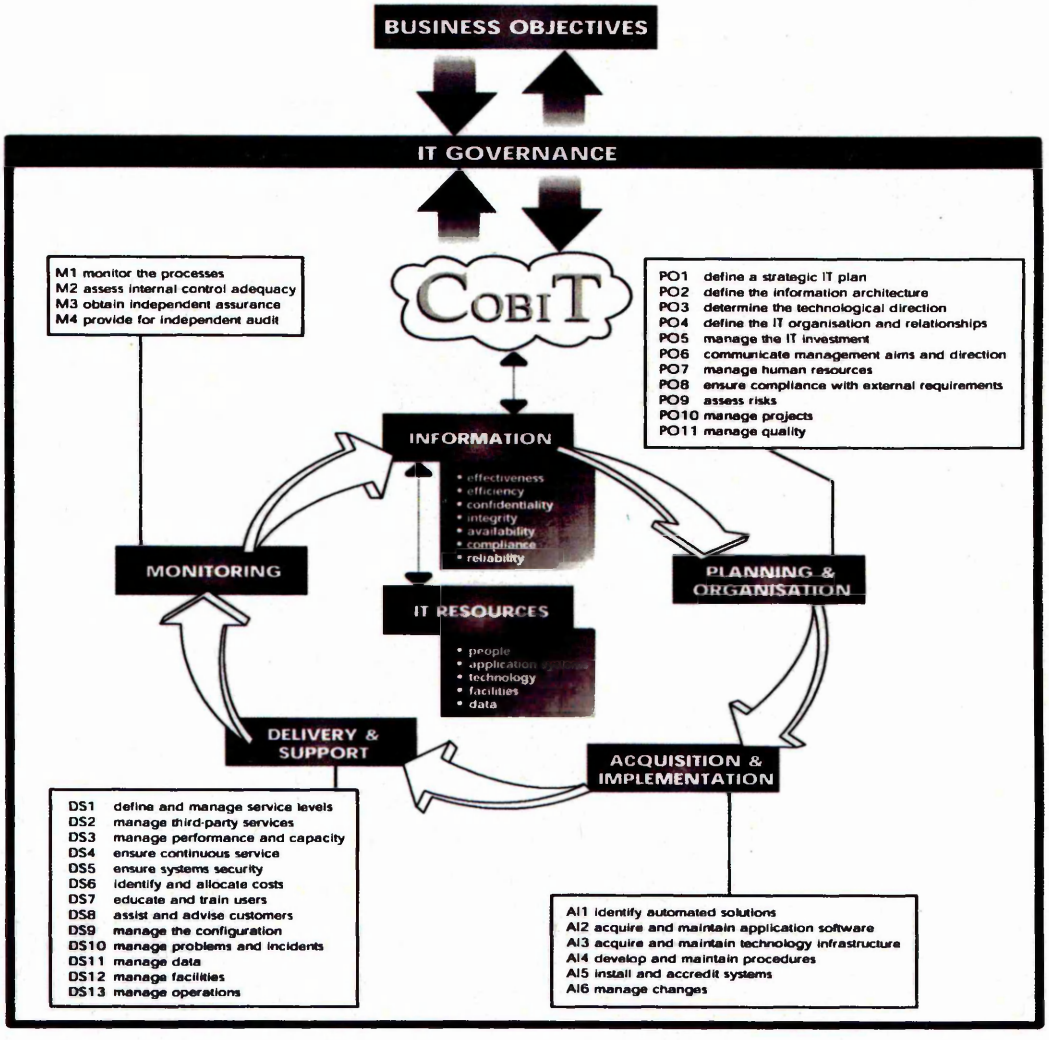
The work of Otley and Berry assisted with providing a basic understanding of control theory. Further, this work (in particular the output based administrative control system and the four control principles) would also prove to be a good evaluation tool for the models and systems developed and implemented as part of this research programme.

Having understood the basic controlling principles, at the other end of the scale is the IT industry recognised Control Objectives for Information and Related Technology (COBIT) framework. This framework was developed in the USA in 1996, is issued by the IT Governance institute, and:

***'is arguably the most appropriate control framework to help an organisation ensure alignment between IT and its business goals, as it places emphasis on the business need that is satisfied by each control objective'***
Colbert and Bowen (1996) – quotation made in the year of the COBIT publication

The COBIT framework is detailed in the figure that follows:

**Figure 2.2 - The COBIT Framework**




**Source – IT Governance Institute www.itgi.org.uk (2004)**

The COBIT framework details the 34 key control objectives (in the areas of Planning and Organisation, Acquisition and Implementation, Delivery and Support and Monitoring). These 34 control objectives are further divided into a set of 318 detailed control objectives.

Since it was developed in 1996:

***'COBIT has been adopted in corporations and by government entities throughout the world'***
Guldentops (2004)

However, the research of Ridley, Young and Carroll (2004) found ***'A low level of COBIT implementation'*** and, where implemented, this was primarily due to reasons of compliance and risk management, for example in USA financial institutes (primarily due to legal requirements compliance and risk mitigation with the Sarbanes Oxley Act (2002)). Reasons cited for the low level of COBIT implementation were that it is too expensive to implement, primarily due to it's complexity and overly bureaucratic nature and therefore widespread implementation has not been forthcoming (Ridley, Young and Carroll (2004)).

COBIT is not a control framework that was developed for ***'specific'*** IT outsourcing arrangements (which is the subject of this thesis) but more for ***'generic'*** IT services and management, which at the time of development in 1996, was for primarily non IT outsourced environments.

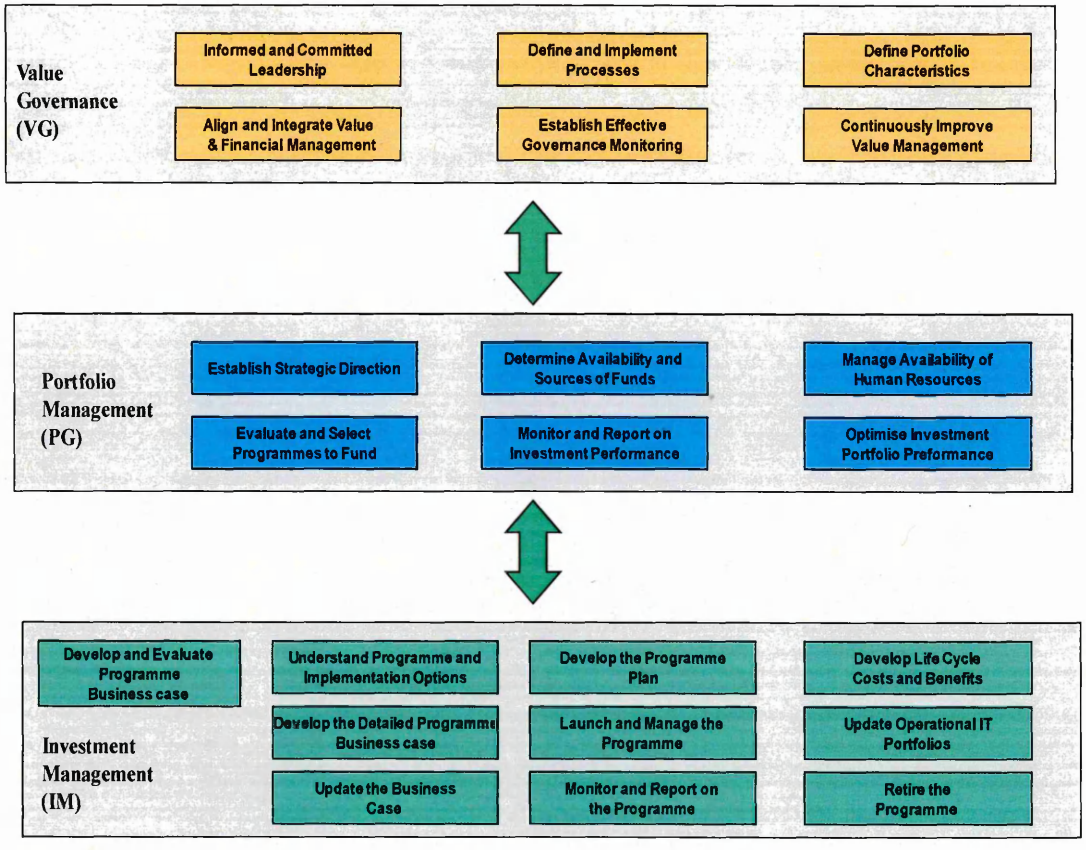
Following on from the development of COBIT, and as a result of the work of the IT Governance Institute, the VAL-IT framework was launched in April 2006. This framework was developed with the backing of, and in collaboration with, major IT organisations such as IBM, Fujitsu, KPMG and Price Waterhouse Coopers and was described by the IT Governance Institute (2008) as:

***'A comprehensive and pragmatic organising framework that enables the creation of business value from IT enables investments. Designed to align with and complement COBIT , VAL-IT integrates a set of practical and proven governance principles, processes, practices and supporting guidelines that help boards, executive management teams and other enterprise leaders optimise the realisation of value from IT investments'***

The IT Governance Institute argued that VAL-IT provides an enterprise level perspective on the creation of business value and also that the framework complements COBIT by focusing on the IT function's role in creating and delivering value from IT enabled business change initiatives and investments. VAL- IT deals with the enterprise governance of IT as opposed to COBIT which addresses specifically IT governance.

The VAL-IT principles are contained within 3 domains, namely Value Governance, Portfolio Management and Investment Management. These domains along with the associated and supporting processes are detailed in the Figure that follows:

**Figure 2.3 - The VAL-IT Domains and Processes**



This Figure details the domains and processes which are required to create business value from IT investments. This is in support of the findings of an IT Governance Global Status report (2008) which highlighted that ***'a significant number of organisational leaders are questioning IT's return on investment'.*** The work of Weill and Ross (2004) and more recently De Haes and Van Grembergen ( 2008) also provided evidence that IT value and benefits management are difficult governance practices to implement.

The work of Bell Wellington (2006) also highlighted the pitfall that may lie in store when implementing VAL-IT :

***'Installing VAL-IT in an organisation will be a major change demanding appropriate change management, and may attack the 'power base' of some employees in both IT and management , who will attempt to resist it'***

The fact that VAL-IT practices and processes span both IT and the business means that the ***'resistance to change'*** to which Bell Wellington referred may have to be overcome in both the organisations business and IT communities and that any change management approach adopted would have to be highly collaborative in nature.

The understanding of basic control theory (Otley and Berry), coupled with an understanding of the highly complex and bureaucratic control and governance frameworks that COBIT and VAL-IT represent, is valuable when designing and applying the ***'IT Governance Framework'*** which is carried out later within this research programme

### 2.1.3 Enterprise Goals

An emerging theme from the available literature is that the board of an organisation can no longer regard IT as something that can be managed within a black box. The traditional handling of IT by board level executives is that, due to limited technical experience coupled with the complexity of IT, key decisions are left to IT

professionals ( hence the black box mentality). It is argued that IT governance should be an integral part of organisations Enterprise governance (or some have termed corporate governance). This may be due to the fact that:

***'The business dependency on Information Technology has made it so that the enterprise governance issues cannot be solved without considering Information Technology'***
Van Grembergen (2004 )

The view of Van Grembergen was further enforced by the IT Governance Institute (2007) (www.itgi.org.uk):

***'IT governance and the effective application of an IT governance framework are critical in helping enterprises gain more value from information and information technology while ensuring that IT remains aligned with the enterprise strategy, values and culture'***

The importance of ensuring alignment or ***'fusion'*** of business and IT strategies was highlighted by Brancheau, Janz and Wetherby (1996) , Plowman (1998) and Farrell (2003). The need to create this ***'fusion'*** was further articulated by Van Grembergen (2002):

***' IT Governance is the organisational capacity exercised by the Board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT'***

Indeed Chan, Huff, Barclay and Copeland (1997) summarised the importance of companies aligning business and IT strategies:

***'Companies that appear to perform best are companies in which there is alignment between realised business strategy and realised IT strategy'***

Without knowing where the business is going, it is impossible to align IT with the business. Thomas (2005) enforced this view:

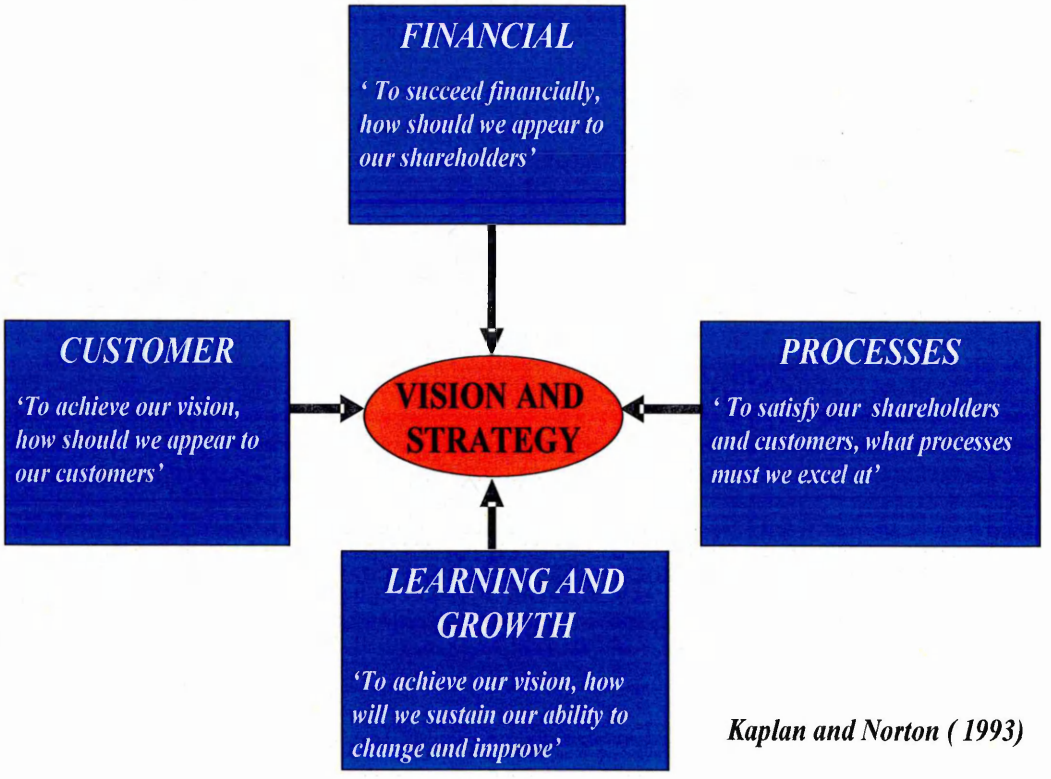
***'The disciplines you need to have good IT governance actually align with the disciplines you need to have good business strategy and governance'***

Although there are few critics to the idea of integrating IT Governance with the enterprises goals, Carr (2004), in his publication ***'Does IT Matter - IT and the corrosion of competitive advantage'***, raised the idea that IT does not imply strategic or competitive advantage. This line of criticism might imply that significant attention to IT governance is not a worthwhile pursuit for senior business and corporate leadership. An objective of this thesis is to test this theory by developing and implementing systems and processes which seek to align IT with the enterprises strategy and goals in pursuit in assisting with the creation of ***'competitive advantage'***

### 2.1.4 IT Value

Before I addressed the specific literature with respect to how IT should deliver value, I obtained a **general** understanding of a strategic value management approach. The work of Kaplan and Norton (1993, 1996) developed a performance / value management balanced scorecard framework which had the objective of enabling organisations to translate their visions and strategies into implementation. This framework is detailed in the figure that follows:

**Figure 2.4 - The Kaplan and Norton Balanced Scorecard Framework**




*Kaplan and Norton ( 1993)*

The Kaplan and Norton IT balanced scorecard operates with the ***'fundamental premise that the evaluation of a firm should not be restricted to a traditional financial evaluation but should be supplemented with measures concerning customer satisfaction, internal processes and the ability to innovate'*** (Van Grembergen (2004)).

The balanced scorecard can also be applied to the IT function and its processes (Gold (1992, 1994), Willcocks (1995), Van Grembergen and Van Bruggen (1997), Van Grembergen and Timmerman (1998) and Van Grembergen (2000, 2004).

In order to gain a **specific** (as opposed to the Kaplan and Norton's generic performance / value criteria) understanding of how IT can deliver value within the context of IT outsourcing, the work of Baldwin, Love and Irani (2001) is a useful

information source. These authors identified four generic motives for IT outsourcing decisions which had the objective of providing IT value. These are contained in the table that follows:

**Table 2.1 - The Four Categories of Motives for IT Outsourcing Decisions**

| Category Description | Category Details |
|---|---|
| **Strategic and Organisational** | • Focus on core business<br>• Eliminate a burdensome IT function<br>• Gain Access to high quality services and skills<br>• Restructure ( i.e. downsizing)<br>• Handle fluctuating IT demand<br>• Exploit new technology<br>• Share risks and rewards<br>• Speedy response to IT needs<br>• Accelerate re-engineering benefits |
| **Political** | • Response to government legislation<br>• Enhancement of credibility<br>• Solve internal conflicts<br>• Reaction to the bandwagon |
| **Technical** | • Access to expertise / technology<br>• Perceived poor performance of internal staff<br>• Access to better quality services |
| **Economic** | • Save costs<br>• Generate a cash flow<br>• Convert capital assets to revenue<br>• Accountability of control<br>• Free resources for core activities<br>• Control IT cost (cost predictability) |

The research undertaken by Baldwin, Love and Irani (2001) is useful in the later part of the research programme in that these motives are compared with the **real world** Royal Mail motives for IT outsourcing.

Aalders (2001) in his publication entitled ***'The IT Outsourcing Guide'*** provided his views on why IT Outsourcing has seen such rapid growth, these included:

*'Improves business and IT processes*
*Brings increased certainty over cost*
*Improves the quality of service*
*Enables a company to keep pace with its competitors*
*Allows focus on core competency and revenue generation*
*Offers flexibility in the quantity of staff*
*Provides access to specialist skills and knowledge'*

As Aalders publication is primarily about the how to implement IT outsourcing it does not contain any information on what might be the problems with, or case against, IT outsourcing. Without wishing to be overcritical with respect to the work of Aalders, (a consultant within PA Consulting Group) he was writing his IT Outsourcing Guide primarily for use by IT Outsourcing consultants who have much to gain by managing the lengthy and complex outsourcing process. These benefits identified by Aalders are later analysed against the field research findings which enables comparisons to be drawn, again within a real world environment.

The work of Weill and Ross (2004) highlighted that organisations with ***'Above average IT governance performance had superior results'.*** Indeed a specific example of how an organisations ***'value'*** could be enhanced by effective IT governance was provided in a case study, again by Weill and Ross (2004 ) of United Parcel Service (UPS). This case study concluded that where ***'IT Governance first helped the firm survive a competitive threat, now UPS's governance mechanisms position IT as a strategic weapon'.*** The ***'value'*** and any links to strategic advantage associated with IT governance will be further explored as part of this research programme.

### 2.1.5 IT risks

Thomas (2005) explained the role of risks within the context of an overall IT governance strategy:

***'The central plank of the IT governance strategy should be about understanding the risks to the organisation and putting procedures in place to manage them'***

There is no single accepted set of generic IT risk definitions, however a study taken from the Economist Intelligence Unit (2002) is recognised as providing a **general** view on what constitutes general IT risks:

- **Investment or expense risk:** The risk that the investment being made in IT fails to provide value for money or is otherwise excessive or wasted

- **Access or security risk:** The risk that confidential or otherwise sensitive information may be divulged or made available to those without appropriate authority

- **Integrity risk:** The risk that data cannot be relied on because they are unauthorised, incomplete or inaccurate

- **Relevance risk:** The risk associated with not getting the right information to the right persons (or process or systems) at the right time to allow the right action to be taken

- **Availability risk:** The risk of loss of service

- **Infrastructure risk:** The risk that an organisation does not have an IT infrastructure and systems that can effectively support the current and future needs of the business in an efficient, cost-effective and well controlled fashion

- **Project Ownership Risk:** The risk of IT projects failing to meet objectives through lack of accountability and commitment

The **specific** IT outsourcing literature review highlighted that IT outsourcing represents a dynamic and high-risk environment (Earl (1996), Aubert , Dussault, Patry and Rivard (1999), Bahli and Rivard (2003), Gallivan and Wonseak (2004). Aubert, Dussault, Patry and Rivard (1999) identified a number of ***'high risk'*** factors associated with IT outsourcing, these included:

- Unexpected IT outsourcing transition and management costs
- Customer ***'lock in'*** to the IT outsourcing arrangement
- Disputes and litigation issues arising from for example a poorly constructed IT services contract
- Service Debasement (i.e. deterioration in level of IT service provision)
- IT services cost escalation
- Loss of organisational IT skills and competencies

An IT Governance Institute (ITGI) board briefing paper (2004) highlighted the importance of ***'Embedding risk management within the IT governance structure that is accountable, effective and transparent, with defined activities and purposes with unambiguous risk management responsibilities'***. An objective of this research programme is therefore to seek to embed risk management into the overall IT Governance design to ensure that ***'Unambiguous risk management responsibilities'*** are incorporated.

# CHAPTER 3

# The Research Methodology

### 3.1 The Research Choices

When considering research choices a key objective of the Doctorate in Business Administration Research programme is to ensure that any research methodologies and frameworks utilised would enable theory generated to be tested within a real world practical environment. The testing within this programme, takes the form of **practical intervention** within the Royal Mail IT outsourced environment which enables theoretically derived systems and constructs to be applied within a real world practical environment.

The practical focus of this research programme draws my research strategy from conventional Mode 1 research towards Mode 2. The differences between Mode 1 and Mode 2 research were highlighted by Van Aken (2001) below:

***'Mode 1 knowledge production is dominated by an academic agenda, is largely executed inside academia, is focussed on 'fundamental knowledge' (rather than applied knowledge'***

***'In contrast Mode 2 knowledge production is solution focussed, orientated not only on analyses of problems but also on designing solutions. It is often trans-disciplinary in nature and characterised by a constant flow back and forth between the fundamental and the applied, between the theoretical and the practical'***

This research programme has a key objective of ***'designing solutions'*** which as stated above are able to span the ***'fundamental and the applied'*** and the ***'theoretical and the practical'.*** This research programme ensures that the five key features of Mode 2 research (as defined by MacLean, MacIntosh and Grant (2002)) are considered as part of the research design. These five features are summarised as follows:

- ***'Knowledge produced in the context of application'*** - This emphasises the problem solving nature of Mode 2 research

- ***'Transdisciplinary'*** - This involves the integration of different skills and knowledge in a ***' Framework of Action'*** ( Gibbons (1994))

- ***'Heterogeneity and Organisational Diversity'*** - Heterogeneous and diverse teams utilised to address the problem situation

- ***'Social Accountability and Reflexivity'*** - An increased focus on ***'social inclusion'*** may lead to a more reflexive form of research with a deeper understanding of the research process itself

- ***'Diverse range of Quality Controls'*** - In Mode 2 research the quality controls may have to address the ***'practicality of any proposed solution to the problem under investigation'*** (MacLean, MacIntosh and Grant (2002))

This research programme also addresses issues, highlighted by Van Aken (2001), associated with the ***'external relevance problem'***:

***'Present academic research does not produce by and large valid research products. These are relevant, as they contribute to academic understanding of the world of management and organisation and to the academic debate and they enhance the position of the researchers in question in the academic reputation system. My problem is not with this internal relevance, but with its relevance outside academia'***

The ***'external relevance problem'*** is addressed by ensuring that this research programme has relevance both within the academic and practitioner communities.

### 3.2 Action Research Utilised as the Research Method

Action research projects were described by Wilson (1984) as:

***'Simultaneously bringing about change in the project situation (the action) while learning from the process of deriving the change (the research)'***

Action research is therefore able to meet my key requirements both as a practitioner with an interest in ***'the action'*** and as an academic wishing to make a credible contribution to knowledge by carrying out the necessary attention to ***'the research'.***

The origin of action research stemmed from the work of Kurt Lewin (1946) who identified a main feature of action research was that it should be focused on specific problem areas (in my case that of IT Outsourcing). The outcome of the action research would then lead to some course of action and intervention, the effects of which would be monitored by appropriate feedback mechanisms. Action research can provide a platform that can lead to many and original ***'theoretical insights'*** (Whetton (1989)). My major motivation for using an action research approach for this research programme is that it is ideally placed to enable ***'theoretical insights'*** to be developed and then to be applied and tested within a practical environment.

Action research is a method that encourages a reflexive approach to the interpretation of the data (Alvesson and Skoldberg (2002), Easterby, Smith and Malina (1999)) and therefore, revisiting and reflecting upon the theoretical and practical developments as the research programme progressed has further appeal in that an improvement cycle could be generated from both theoretical and practical perspectives.

My dual role of researcher and practitioner presents difficulties in separating myself from the field of study. It is therefore better to accept my involvement, as itself part of the subject to be researched. Checkland (2001) provided his views on action research which further assists in articulating my positioning within the action research process:

***'The concept of action research arises in the behavioural sciences and is obviously applicable to an examination of human activity systems carried out through the process of attempting to solve problems. Its core is the idea that the researcher does not remain an observer outside the subject of investigation but becomes a participant in the relevant human group. The researcher becomes a participant in the action, and the process of change itself becomes the subject of research'***

The argument put forward by Checkland is that when the phenomenon under study involves social interactions, the ***'researcher'*** will not remain solely an observer but will become a ***'participant'*** in the research process . This is a situation that I fully related to as an employee of Royal Mail who were considering an IT Outsourcing route. I am not only the ***'researcher'*** who has an intention to make a contribution to knowledge in the IT Outsourcing management and governance fields but also a key ***'participant'*** and practitioner in the outsourcing process itself.

Because of these dual roles as researcher and participant it was important to be self aware of my ***'intrusiveness'***. Gill and Johnson (1997), Mc Grath (1982) and Huxham and Vangen (2002)) provided caution with respect to the research becoming intrusive upon the action:

***'The more the research becomes intrusive on the action, the less 'real' (in the sense of being representative of normal behaviour) the action is likely to be and the more difficult it becomes to interpret the outcomes'***

A research objective is to ensure that the research programme remains as ***'real'*** as is possible. Drawing further on the work of Huxham and Vangen who identified three design choices (although they are not advocating design choices should be limited to these) with respect to action research:

- ***'Overtness'*** - To what extent will the research aspects of the intervention be brought to the attention of the practitioners?

- ***'Visibility'*** - To what extent will the research data collection methods be allowed to intrude upon the action intervention?

- ***'Riskiness'*** - To what extent is the researcher prepared to take risks over the success of the action intervention for the sake of the research aims?

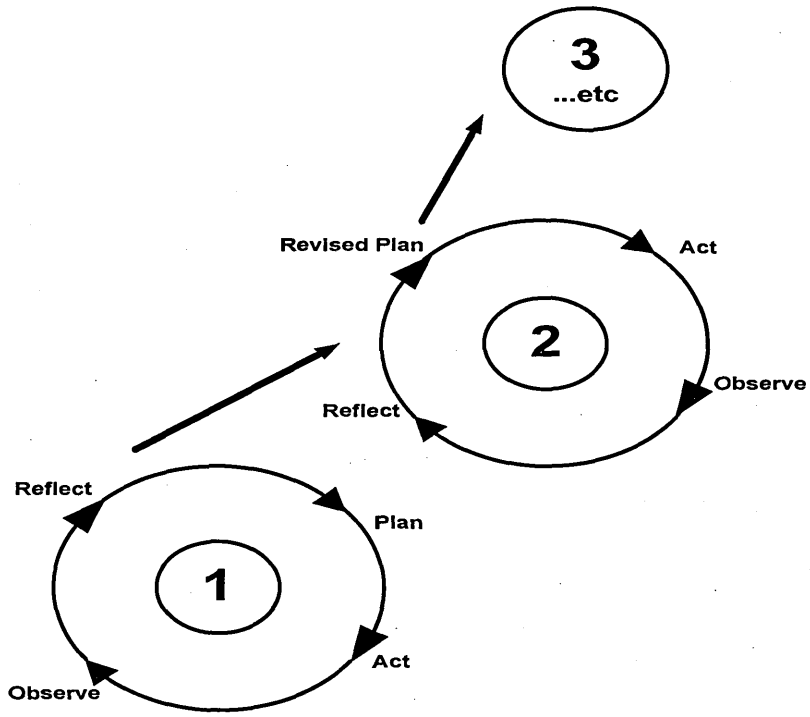
At the risk of oversimplification I am sceptical about the ***'overtness'*** design choice as there was a major risk of treating the research participant's as guinea pigs. On the opposite end of the continuum the ***'riskiness'*** research approach engenders taking a risk based approach based on a personal agenda. This in my opinion is not an ideal research process for which the outcomes could provide intervention and influence into what could be a multi billion pound Royal Mail IT outsourcing commercial contract. My positioning and belief is that, accepting that no one research choice fits perfectly, I am drawn to the ideology of an action research approach based on ***'visibility'***. My aim and objectives are to take an open and honest approach when dealing with research data and findings. A key objective is to create an action orientated inclusive research community.

To further explain my positioning within action research, consideration is given to the categories of enquiry as articulated by Carr and Kemmis (1986), Grundy (1987) and more recently by Darwin, Johnson and McAuley (2002). The categories of ***'Technical', 'Practical' and 'Emancipatory'*** serves as a useful tool in analysing my own positioning within this research programme and how I would enquire and interact within the research community. My own positioning (again accepting that there is no perfect fit) is within the ***'Practical'*** domain where as Darwin, Johnson and McAuley (2002) stated the research process is based on:

***'Understanding the environment through interaction based upon a consensual interpretation of meaning'***

Action research operates on the premise that research is ***'highly reflective'*** and is in effect an open ended cycle based on what is being observed. This is detailed in the figure that follows by Zuber-Skeritt (2001):

**Figure 3.1 - The Spiral of Action Research**




**Source: Zuber-Skeritt (2001)**

Kemmis and McTaggard (1988) summarised the reflective nature of actions within the context of this research programme and the need for my own self-reflective inquiry:

***'Action research is a form of collective, self - reflective inquiry that participants in social situations undertake to improve: (1) the rationality and justice of their own social or educational practices and (2) the participant's understanding of these practices and the situations in which they carry out these practices'***

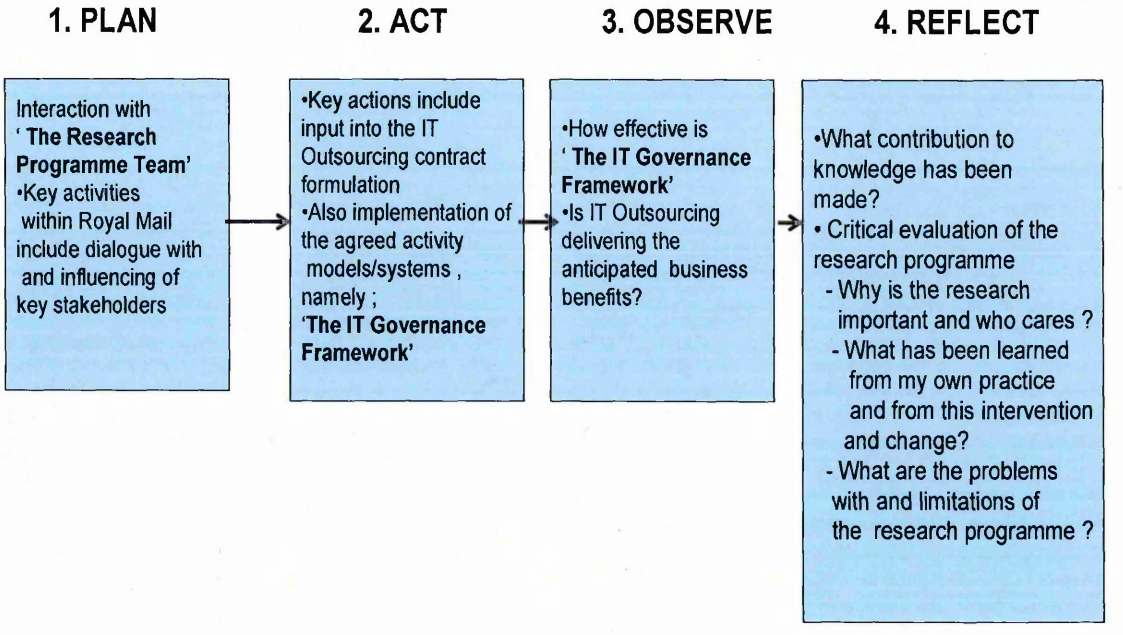
The adoption of a ***'self reflective'*** style is important within the context of my dual role of researcher and practitioner. It is necessary to display a high level of interpersonal sensitivity and personal awareness of my potential influence over the research programme participants. It is important, that in my role of researcher, I did not impose any preconceptions on the practitioners involved within the research programme and equally as important that I did not impose any preconceptions I had as a practitioner on the research subjects involved in the research activities. The challenges of this research programme involve critical self analysis and reflection around the issues of ***'how one thinks about thinking'*** (Maranhao 1991). It also involves:

***'Attention to the complex relationship between processes of knowledge production and the various contexts of such processes as well as the involvement of the knowledge producer'***
Alvesson and Skoldberg (2002)

My role of researcher, or ***'knowledge producer',*** in addition to the practitioner role, provides different challenges and contexts which require consideration throughout the course of this research programme.

This research programme follows the ***'four moments'*** of Action Research (Carr and Kemmis (1986). This is detailed in the figure that follows:

**Figure 3.2 - The 4 Moments of Action Research**




**The 4 'moments' of Action Research – Adapted from Carr & Kemmis (1986)**

The ***'planning'*** stage involves the setting up of a Research Programme Team which enables interaction and dialogue with key stakeholders. The ***'act'*** stage enables theoretically derived activity models and systems (which constitute the IT Governance Framework) to be tested within a practical environment. The ***'observation'*** stage enables views to be gained on the effectiveness of the IT Governance Framework, for example whether IT outsourcing is delivering the anticipated business benefits. Finally the ***'reflect'*** stage evaluates what contribution to knowledge has been achieved and provides a reflective critical evaluation of the research programme outcomes.

### 3.3 Soft Systems Methodology (SSM): Justification as the Research Theoretical Framework

SSM has been developed by Peter Checkland at the Department of Systems at the University of Lancaster and its associated consultancy company ISCOL Ltd since 1969. SSM represents a well developed theoretical framework which has advantages articulated by Alvesson and Skoldberg of being:

***'A well developed theoretical frame of reference can also help us make good interpretations'***

As a starting point in justifying the influence of Soft Systems Methodology (SSM) as my theoretical framework and making ***'good interpretations'*** within the context of this research programme I draw upon the views of Patching (1994):

***'SSM is not a technique that requires certain procedures to be followed in order to obtain a predictable outcome, but is a set of guidelines for applying systems ideas to problem situations. Although these guidelines help an analyst approach investigations methodically, they still allow scope for individual interpretation'***

***'Individual interpretation'*** is a key concept within SSM with the underlying philosophy being that each researcher will engage in the subject area and inevitably interpret their own version of reality from a subjective viewpoint. The definition of SSM, as provided by Bulow (1989), linked SSM to the real world issues that my research programme addresses:

***'SSM is a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is ideally never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models'***

As Bulow states, SSM facilitates taking action in the real world which is why it is an ideal research tool for practitioners like me who are tasked with putting forward practical solutions to complex issues and problems in the real world. Bulow also made the point that SSM facilitates critical reflection and debate using systems concepts. This again is a key issue for me, in ensuring that I took an holistic and critical approach to the research programme.

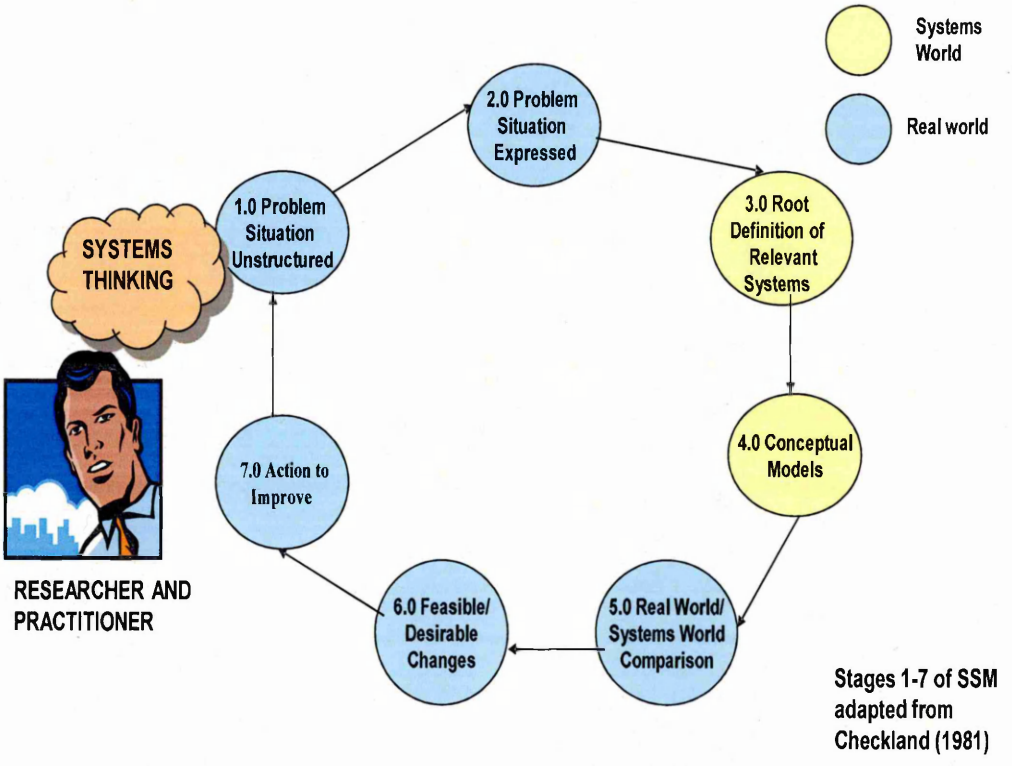
SSM is ideally suited to researchers working in action research mode. The following quote confirms the relationship between action research and SSM:

***'It (SSM) is also a useful research tool, especially for those working in an action research mode. Thus it helps organise complex research projects, especially when incorporating different forms of data from different sources. In addition, it provides a means for analysing and understanding problems in complex systems, as well as for identifying alternatives and options for improvement and change'***
Cassell and Symon (1998)

A key objective of this research programme is in making a valuable contribution to knowledge within the IT Outsourcing and specifically IT Governance fields. This, coupled with providing practical intervention within the IT outsourcing environment, involved identifying and implementing actions which as Cassell and Symon stated provided ***'alternatives and options for improvement and change'***

Throughout the nineteen eighty's Checkland's Seven Stage model of SSM was the universally accepted model of SSM. The seven stages of SSM are detailed in the figure that follows:

**Figure 3.3 - The 7 Stages of SSM**



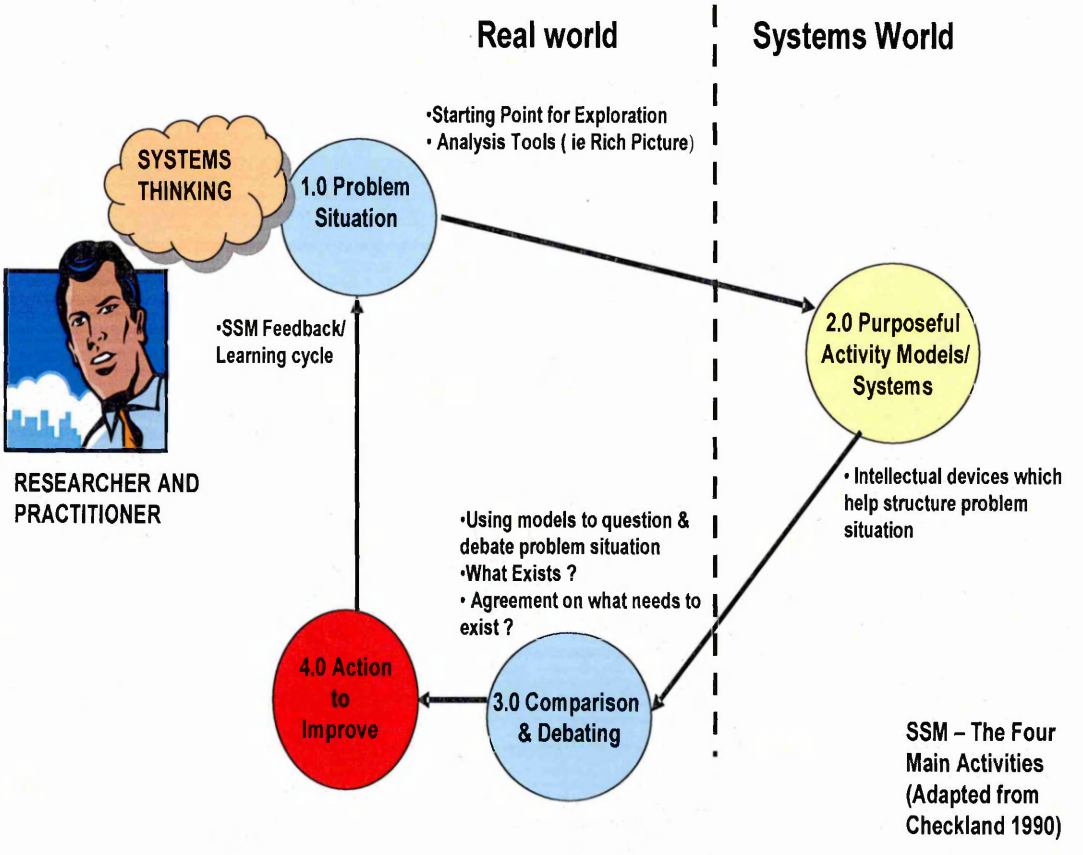

In this 7 stage SSM model the first 2 stages involve understanding the problem situation and providing an expression of the problem situation. The next stages 3 and 4 are carried out within the ***'Systems World'*** and involve producing root definitions (explained later in this chapter) and developing conceptual models to address the problem situation. The conceptual models are then utilised in stage 5 to compare and debate the ***'real world'*** and systems world along with suggestions for desirable changes (stage 6). The final stage 7 involves taking action to improve the problem situation, or providing intervention to provide the necessary change thereby enabling the cycle to begin again.

SSM evolved to a position where in the early 1990's the seven stage model was:

*'No longer felt able to capture the more flexible use of SSM'*
Checkland (2001)

As a consequence, in 1990 the SSM model was redefined to include four main activities which are detailed in the figure that follows:

**Figure 3.4 - The 4 Key Stages of SSM**



This four stage model influenced, and was used as the basis of the research programme theoretical framework, the key stages are summarised as follows:

**SSM Stage 1 - Problem Situation**

The first stage is to express the problem situation. This is carried out by constructing rich pictures which, as Checkland (2001) highlights, have advantages of taking an ***'holistic'*** rather than ***'reductionist'*** view of the problem situation which in my case are the issues and problems of IT outsourcing:

***'Pictures can be taken in as a whole and help to encourage holistic rather than reductionist thinking about a situation'***

Checkland (2001)

**SSM Stage 2 - Purposeful Activity Models and Systems**

This stage deals with developing root definitions and descriptions of what the systems may be and what they should achieve. In my research context it involves definitions of systems which ensure that the benefits of IT outsourcing are realised. This involves utilising what Checkland (2001) has termed the **CATWOE** criteria (i.e. **C**ustomers, **A**ctors, **T**ransformation, **W**eltanschauung (worldview), **O**wners and **E**nvironment constraints). Although the CATWOE criteria acts as a useful checklist in analysing system requirements, as Wastell (1996) argued, there is a danger of developing an overly rigid approach and an over dependence on the methodology. As a result there is a danger of the researcher becoming ***'blinkered'*** and using the methodology in a manner that Wastell would describe as a ***'fetish of technique'***

**SSM Stage 3 - Comparison and Debating**

The next stage involves developing theoretical and conceptual models and frameworks within the systems world and then comparing these models with what may exist (and what needs to exist) in the real world. This represents an excellent opportunity to critically reflect on the real world (my role of practitioner within Royal Mail) and the theoretical world (my role as researcher and academic) aspects of this research programme.

**SSM Stage 4 – Action to Improve**

The final stages of SSM involve taking action to improve the IT outsourcing problem situation and relate to agreeing and then implementing the required changes and actions. The actions to improve result in identifying changes to current practices and challenging existing theoretical frameworks and thinking. Checkland (2001) highlighted the issues with implementing changes to current working practices:

***'Learning from experience is difficult for everyone. Everyday life develops in all of us trusted intellectual structures which to us seem good enough to make sense of our experiences, and in general we are reluctant to abandon or modify them even when new experiences implies that they are shaky'***

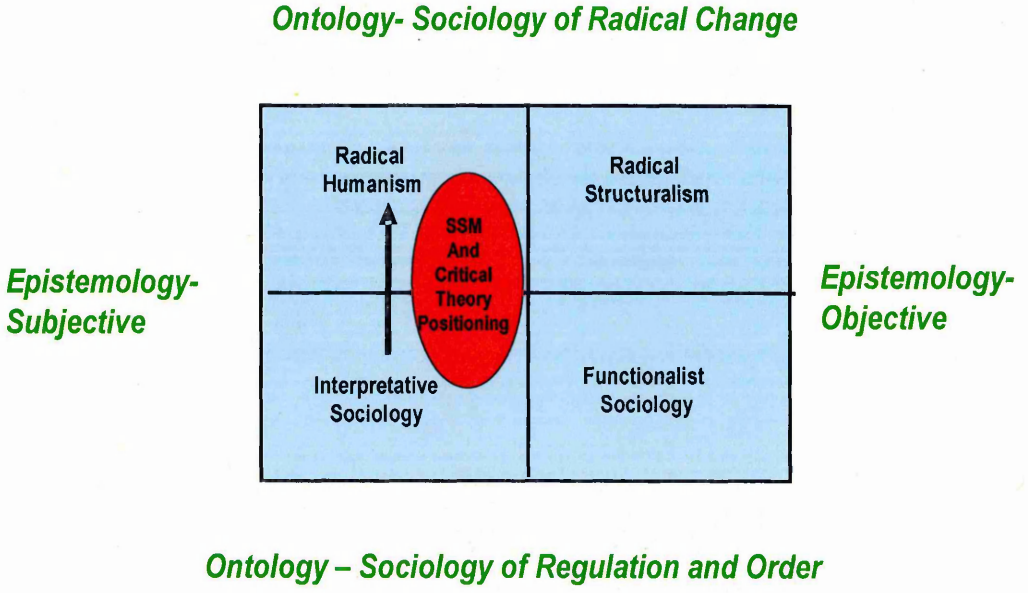
The process of implementing changes to current working practices is a challenging and interesting aspect of this research programme. This involves the introduction of new working practices and frameworks and challenging the validity of existing working practices and frameworks, which as the quotation above states people may be ***'reluctant to abandon'***

The actions are subsequently monitored for effectiveness, therefore SSM can be regarded as an open ended highly reflective research framework. This works well with my programme research objectives, accepting that both my theoretical and practical contributions to knowledge will be tested and challenged over a period of time by both practitioner and academic communities.

### 3.4 The Epistemological Considerations and Positioning

The research programme epistemological positioning draws upon the typology of social science work of Burrell and Morgan (1979) .This is detailed in the figure that follows:

**Figure 3.5 - The Research Epistemological Positioning**




Source- An adaption of the Burrell and Morgan typology of social science (1979)

Checkland (2001) positioned his SSM methodology within Burrell and Morgan's typology of social science quadrant. The rationale for this was summarised by Checkland (2001) below:

***'Given the analyst's complete freedom to select relevant systems, which, when compared with the expression of the problem situation, embody either incremental or radical change, the area occupied must include some of the subjective / radical change quadrant'***

SSM facilitates either incremental or radical change, depending on the nature of the change required. From my own perspective this research programme involves developing and implementing new systems and processes which facilitate the significant move from an in sourced to outsourced environment. This change is therefore more radical than incremental in nature.

My epistemological positioning is within the subjective quadrants of Burrell and Morgan's typology of social science. This is in line with both the SSM and Action Research methodologies that are used as part of this research programme. Both of these methodologies and highly interpretative and therefore subjective in nature. This enforced by Gill and Johnson (1997) who, when describing Action Research, stated that ***'The researcher acts upon his or her beliefs'***

The definitions of Radical Humanism and Interpretative Sociology provided by Johnson and Duberley (2000) provides further assistance in explaining my epistemological positioning:

***'Radical Humanism – socially constructed realities entrap people who are complicit in their sustenance. The aim is to release people from these ideological constraints through developing alternatives'***

The ***'alternatives'*** are the change mechanisms that constitute the new IT Governance Framework systems, processes and ways of working which are developed and implemented as part of this research programme. The ***'social construction'*** of the IT Governance Framework takes place with key stakeholders within Royal Mail.

***'Interpretative Sociology- since organisations have no prior independent existence they are to be understood from the participant's point of view with the aim of understanding how shared versions of reality emerge and are maintained'***

This research programme engages 'participants' both from external organisations and from within Royal Mail. This engagement enables ***'interpretations'*** to be made and ***'shared versions of reality'*** to emerge and be subsequently tested within a practical and real world environment.

Checkland (2001) positioned SSM within the same area as critical theory. The work of Prasad and Caproni (1997), which identified the four broad themes relating to critical theory, is compared with my own research programme approach. This is detailed in the table below:

**Table 3.1 - The 4 Broad Themes of Critical Theory**

| **Prasad and Caproni ( 1997) - The Four Broad Themes Relating to Critical Theory** | **Research Programme Approach** |
|---|---|
| **1.0 An emphasis of the social construction of reality** | **Social construction would take place by engaging with external organisations and also within Royal Mail** |
| **2.0 A focus on issues of power and ideology - for example an awareness that social constructions are influenced by power relations** | **The research programme would consider the *'power relations'* and personal agendas across Royal Mail** |
| **3.0 The need to understand any social or organisational phenomenon within holistic contexts** | **IT Governance and IT Outsourcing would be considered within the wider context of outsourcing and organisational strategy and behaviour. By doing this an *'holistic' context'* would be developed** |
| **4.0 The importance of the ongoing construction of social arrangements (defined as 'Praxis' )** | **The system's , processes and ways of working developed throughout this research programme would be *'socially constructed'* by engaging with key stakeholders and teams across Royal Mail** |

To summarise this Chapter, this research programme utilises Action Research as the research method and SSM as the theoretical framework. This approach enables the theoretical construction, or design, of an IT Governance Framework which is tested by practical intervention within the Royal Mail IT Outsourced real world environment. This approach is highly interpretative and there is significant interaction with users and key stakeholders to enable the IT Governance Framework to be designed and applied. This approach enables a period of observation and then reflection to be incorporated into the research programme.

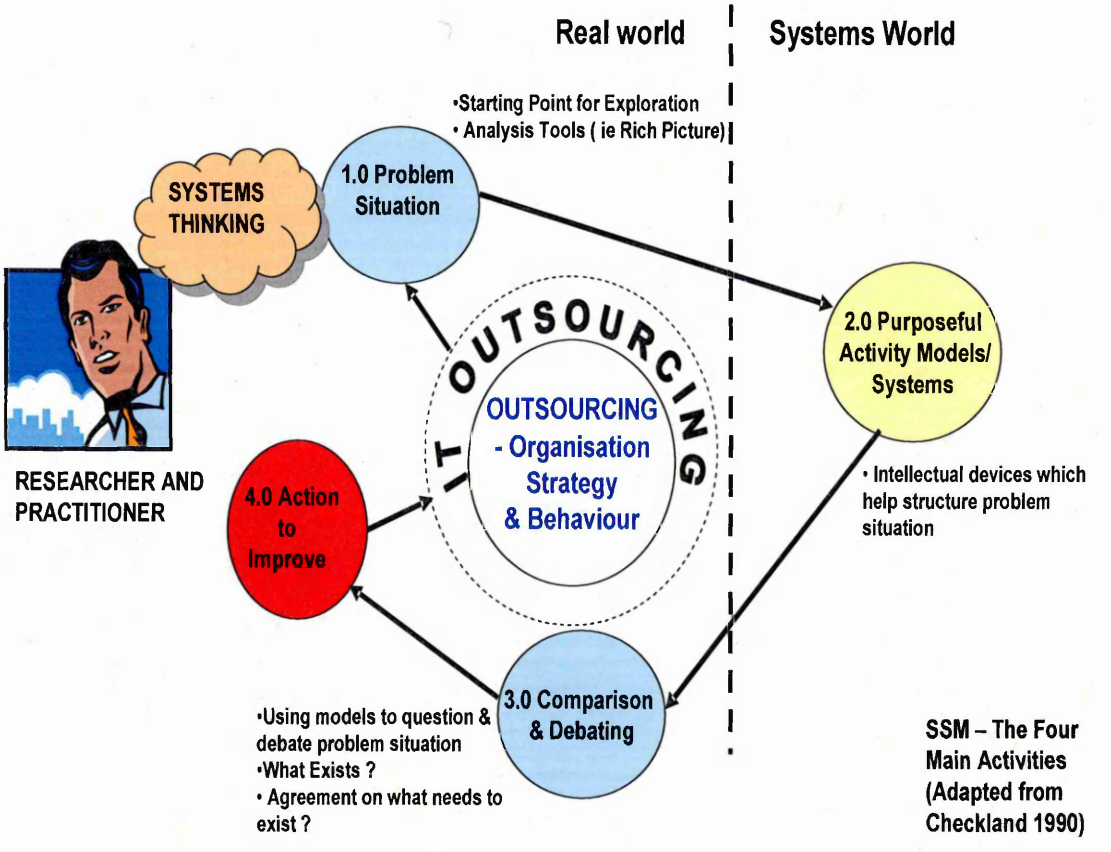
# Chapter 4

# Defining the Information Technology Outsourcing Problem Situation

### 4.1 Soft Systems Methodology (SSM) in Practice

This chapter details how SSM was applied in practice to initially define the IT outsourcing problem situation. The figure below details the four key stages of SSM and highlights the requirement to initially define the IT outsourcing problem situation:

**Figure 4.1 - The Research Programme and SSM**




The centre of the diagram details a deviation from the conventional SSM methodology with the addition of the initial focus on studying outsourcing within the wider context of organisational strategy and behaviour.

This up front research took place before the IT outsourcing problem situation was addressed, it enabled a generic understanding of outsourcing as a whole to be achieved with the advantage of using this knowledge within the specific context of IT outsourcing. This understanding addressed the concerns of Alvesson and Skoldberg (2001) who stated:

***'The meaning of a part can only be understood if it is related to the whole'***

### 4.2 SSM STAGE 1:- Real World – The IT Outsourcing Problem Situation

According to Checkland (2001) the initial problem situation stage of SSM is;

***'To find out about the problem situation while trying not to impose a particular structure on it'***

To ensure that I did not impose my own ***'structure'*** on the IT outsourcing problem situation it is important as Checkland (2001) argued for me in my role of researcher to ***'Obtain as many perceptions of the IT outsourcing problem situation as possible'***. History has also shown that when using the SMM methodology that taking time to pause and reflect over the ***'problem situation'*** may produce a more beneficial research outcome (Patching (1994), Checkland (2001), Symon and Cassell (1998)).

The literature review and analysis of IT outsourcing has been provided earlier, to summarise this, there is a conundrum in that there has been a rapid recent growth of the IT Outsourcing market despite significant evidence that IT outsourcing was not delivering the anticipated business benefits.

In order to delve deeper into the IT outsourcing problem situation I took a decision to engage with organisations that have experience of IT outsourcing. This engagement with, selected organisations, resulted in first hand qualitative data gathering and analysis, to add to, draw comparisons against, and indeed challenge the existing stock of IT outsourcing literature and perceptions. Engagement with these

organisations would enable the creation of a 'real world' view of the IT outsourcing problem situation. This enabled a sound platform to be created for the subsequent stages of this research programme.

Some academic studies have adopted a largely passive (i.e. no intervention has been provided to address the problem situation) approach to the IT outsourcing issues and concerns that their respective research has highlighted Examples of this being Earl (1996), Lacity and Willcocks (2001) and Casey, Ellis, Whitten (2002). My own approach is, as an academic, to add to the IT outsourcing literary debate. However, as a practitioner, the action research and SSM methods I adopt has sought to provide a unique and original practical intervention in the Royal Mail IT Outsourcing environment.

Because of the lengthy nature of the IT outsourcing process within Royal Mail, and the seven year period to complete this doctorate , it has been possible to devote the 'up front' research time to seek out and engage with organisations who have in depth exposure and practical first hand knowledge of IT outsourcing. This was an unusual opportunity as other research programmes may be subject to more limited time constraints - particularly research programmes adopting SSM where the methodology requires early definition of the problem situation in order that the further stages of SSM can be progressed.

The following paragraphs explain the approach to the engagement with the organisations that have experience of, and exposure to, IT outsourcing. The next paragraph deals specifically with the research questions.

### 4.2.1 The Research Questions

The literature review raised a number of issues that formed the basis of key question areas for the field research. Generally IT outsourcing literature did not deal with IT outsourcing from an ***'end to end'*** or complete ***'lifecycle'*** perspective. Because my research programme covers the full extent of the IT outsourcing lifecycle (i.e. from pre-outsourcing considerations to life within a post outsourced environment) it is important for me to obtain information and gain as many ***'perceptions'*** (Checkland 2001) as possible.

The work of Aalders (2001) suggested that the IT outsourcing lifecycle broadly consists of the following key stages:

1. ***'Pre - IT Outsourcing'*** - This stage includes the considerations and criteria for an organisation to undertake the decision to embark on IT outsourcing

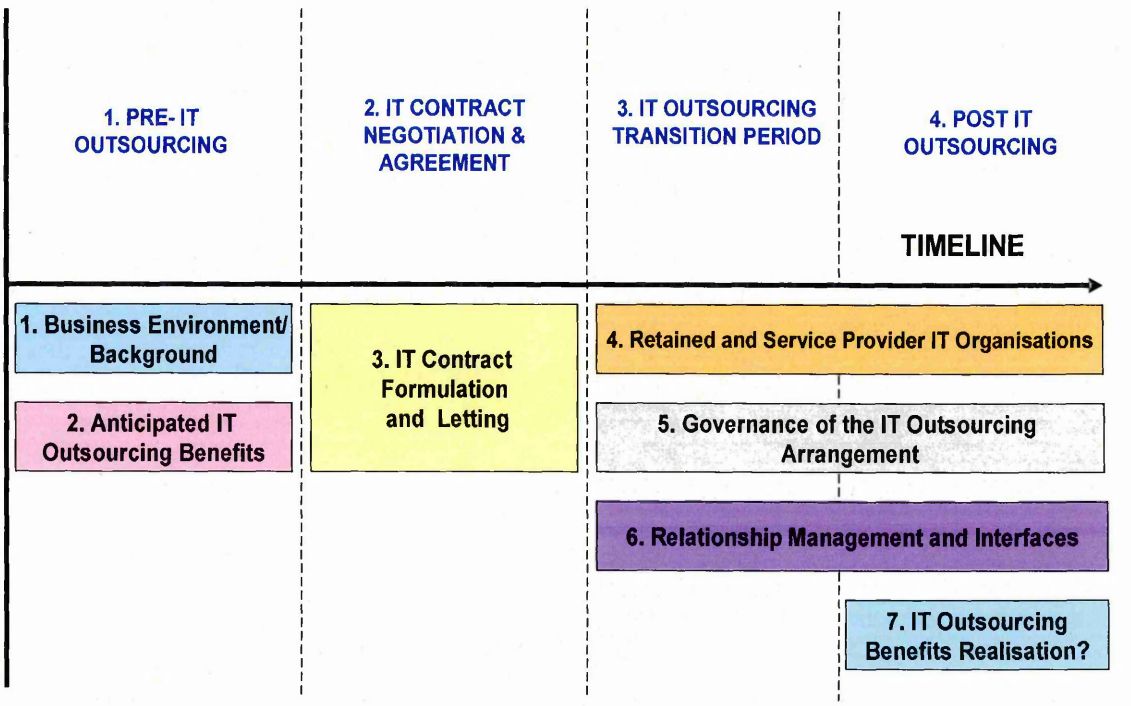
2. ***'IT Contract Negotiation and Agreement'*** - This is the period where the IT contract is negotiated between the customer and IT Service provider. This can be a lengthy and complex process which depending upon scale and complexity can take typically around 1 year to complete (Aalders (2001))

3. ***'IT Outsourcing Transition Period'*** - The transition period will take place after the IT contract has been completed and signed by both parties. This may include for example the transition of IT employees from the customer to the IT service provider as well as the transfer of IT assets and systems. A typical transition period can take up to 120 days (Aalders 2001)

4. ***'Post IT Outsourcing'*** - This is the stage where the IT outsourcing process is complete and the relationship between the customer and IT service provider established

The following figure details the key stages of the IT outsourcing lifecycle over a timeline:

**Figure 4.2 - The IT Outsourcing Lifecycle**




The literature review highlighted a number of areas where further evidence and clarification of the IT outsourcing issues and concerns are required spanning the full IT outsourcing lifecycle. This research approach enabled first hand qualitative data to be extracted from organisations that have experienced IT outsourcing. These areas formed the basis of the key questions (1-7), which are detailed in the lower part of the IT outsourcing lifecycle figure.

The question areas along with relevant rationale and justification for their inclusion are as follows:

### *Question Area 1 - Business Environment / Background*

The business environment is likely to influence an organisations decision to undertake IT outsourcing. The decision could be based on, for example, wider business, strategic and operational drivers. It would be naïve to assume that IT outsourcing is an organisationally independent activity since it may depend on a number of factors (for example organisation size, market sector, economic conditions, prevailing governance etc). This area of questioning also enables data to be obtained about the business climate and drivers at the time IT outsourcing was considered.

This research would confirm or challenge Strassmans (1995) opinion that ***'IT outsourcing is a game for losers'*** and that organisations who were outsourcing their IT capability were amongst other things in financial trouble and were in the wider process of downsizing (Strassman used the terminology ***'shrinking'*** ) 'their respective organisations.

### *Question Area 2 - Anticipated IT Outsourcing Benefits*

There is a degree of ambiguity within the IT outsourcing literature with respect to anticipated benefits. For example Morgan Chambers (2001) have cited cost savings and improved quality of service as being two key anticipated benefits of IT outsourcing. Research in this area made it possible to take a 'sense check' of what organisations see as the potential benefits in undertaking IT outsourcing. This adds to, and may potentially challenge, the current literature within this area.

### *Question Area 3 - IT Contract Formulation and Letting*

The following quotation by Lacity and Hirscheim (1995) articulated the importance of the IT contract, which is agreed between a customer and IT outsourcing company:

***'If a company decides to outsource, the contract is the only mechanism to ensure that expectations are realised'***

Lacity and Hirscheim made a proviso to this bold statement that the customer and outsourcing company must engage in a relationship of mutual co-operation to ensure that expectations are realised. This does however highlight the importance attached to ensuring that an effective IT contract is in place. The agreed IT contract will form the basis for the future contractual interfaces between the customer and IT service provider.

The work of Nam, Rajagopalan and Rao (1996) put forward the ***'Incomplete contract theory'***. Here it was argued that it was not possible to know the future contractual requirements of an IT outsourcing arrangement due to the dynamics of the IT market place, changes in strategies, and emergence of new technologies (all elements which are argued cannot be defined when the contract is signed. Beulen and Ribbers (2003) built on the incomplete contract theory:

***'Attempts to include all possible future scenarios into an IT outsourcing contract requires intense efforts from both the outsourcing organisation and the IT suppliers and may well be an impossible task'***

This highlighted the problematic and indeed complex nature of formulating and subsequently letting an IT contract and provides justification and reasoning for me as a researcher to carry out further research and analysis in this area. Within my role as a practitioner within Royal Mail I was faced with the very practical issue of ensuring that any contract that Royal Mail enters into is based on as rigorous a process as possible. Therefore my objective of carrying out research and questioning on the methods and criteria by which organisations have managed to agree and let IT contracts assists in ensuring that the Royal Mail IT contract is as ***'complete'*** and comprehensive as possible. The output of this may also form a valuable contribution to knowledge for other organisations that may be faced with similar tasks of formulating and letting IT contracts.

Finally, within my capacity of researcher and academic I have an interest in understanding the rationale around IT contract formulation and letting. This enables me to add to the professional practice and theoretical literature with respect to this area.

### *Question Area 4 - Retained IT Organisation*

The interview sessions with the selected organisations enabled first hand knowledge of the retained IT organisations to be gained. This knowledge enabled analysis to be carried out with the objective of providing views on what constitutes an effective and efficient retained IT organisation as well as obtaining views of any mistakes that have been made with respect to the organisations retained IT structures. Some of the key question areas with respect to the organisations retained IT organisations were as follows:

- Details of the retained IT organisation in terms of size, structure, scope and functions

- Rationale around formation of the retained IT organisation

- How effective and efficient is the retained IT organisation?

Research by Gartner (2002) and Meta (2002) has highlighted that the commitment to new technology innovation and exploitation between a customer organisation and outsourced company has generally been poor. Therefore to attempt to 'get under the skin' of this issue, questions were raised with respect to how new technology opportunities are exploited. Also having worked within the technology sectors for over twenty years I had experienced, first hand, the importance of keeping up to date and exploiting new technology opportunities. Therefore the organisations were questioned with respect to how new technology exploitation is achieved (for example is this provided by the IT service provider or by the retained IT organisation (or indeed a combination of both) and how effective this is.

### *Question Area 5 - Governance of the IT Outsourcing Arrangement*

The literature review highlighted the role of IT Governance and made a link with a ***'loss of control'*** over the IT outsourcing environment:

***'IT Governance is the system of structures and processes for directing and controlling Information Systems'***
Sherer (2004)

This ***'loss of control'*** issue is also supported by other research, including the work of Willcocks, Fitzgerald and Lacity (1996), Farrell (1999), Grover Cheon and Teng (1994) and Gordon (1994). It is therefore important from both academic and practitioner perspectives that appropriate ***'control'*** mechanisms are a key consideration within the overall IT Governance framework design. This area of questioning enabled qualitative data to be gathered to enable a view to be obtained if indeed there was a control (or lack of control) issue present within the research organisations.

A critical evaluation has been provided earlier within the literature review with respect to the COBIT (Control Objectives for Information and Related Technology) IT control framework. To summarise, this IT control framework developed in 1996 in the USA, is an extremely comprehensive framework, which is used by some large organisations (primarily in the USA). It has however been perceived by some to be expensive to implement, primarily due to it's complexity and overly bureaucratic nature, and therefore widespread implementation has not been forthcoming. The questions in this area therefore provided an opportunity to assess if any of the organisations have adopted COBIT (or any other IT control framework), and therefore, a critical evaluation can be made of the 'real world activities' compared with the key findings from the theoretical literature review. Also COBIT contains details of how key IT controlling and monitoring activities such as audit, compliance and risk management are discharged. Again questions in this area provided an opportunity to find out first hand how these activities are carried out within the respective organisations.

Linking back to the earlier question area on IT contract formulation and letting, it was a useful research activity, as the IT outsourcing lifecycle progresses through to the Governance stage, to ascertain first hand how the IT contract has assisted with control over the IT outsourced environment. For example control may be exercised by the IT outsourcing customers retaining contractual ***'reserved rights'*** over an IT service provider (Aalders 2001). Questioning in this area ascertained if any reserved rights have been used and how successful in practice they have been.

To summarise, to obtain an insight into how the organisations governed their respective IT service providers questions were raised in the following areas:

- Do any of the organisations make use of any IT governance, controlling or management frameworks?
- How are audit, compliance and risk management obligations discharged?
- Are any contractual 'reserved rights' specified which assist with governance and control over the IT service providers?

### *Question Area 6 - Relationship Management and Interfaces*

The relationship management and interfaces between the customer and IT service provider provide the practical means of ensuring that any theoretically derived frameworks and systems are implemented within a 'real world' environment. It was therefore important to understand how the relationships between the organisations and their respective service providers operate from a practitioner's perspective.

Also by undertaking research in this area it was possible to critically evaluate the 'real world' activities against the theoretical perspectives, which have been explored within the earlier literature review. For example it is argued that ***'trust'***, a basic concept of ***'social exchange'*** theory, is one of the most desired qualities in any close relationship (Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999)). Also McKeen and Smith used the term the ***'level of intimacy'*** between the customer and IT service provider. It was argued that achieving a ***'level of intimacy'*** would provide an opportunity to build ***'trust'*** into a relationship.

The research questioning in this area enabled a first hand understanding and insight of how relationships operate within a 'real world' practical environment. It also enabled comparisons to be drawn against some of the theoretical relationship perspectives that exist. From a theoretical/academic perspective, first hand knowledge would be gained on how (or if?) a ***'level of intimacy'*** and ***'trust'*** was developed within the context of the IT outsourcing relationships that were examined.

Finally the literature review had highlighted the importance of having effective IT outsourcing change management mechanisms in place (Farrell (2002) and Morgan Chambers (2002)).Therefore this question area would ascertain, first hand, the change mechanisms that were in place within an IT outsourcing environment and would obtain views on how effective these are.

### *Question Area 7 - IT Outsourcing Benefits Realisation*

In order to obtain an insight of the complete, or 'end to end', IT outsourcing lifecycle process it was necessary to carry out research on what the IT outsourcing benefits have been (assuming this had been the case). This provided a comparison of the anticipated benefits the organisations initially set out to achieve at the start of the IT outsourcing lifecycle, against the actual benefits achieved in a post IT outsourced environment.

Questions in this area also ascertained if any of the balanced scorecard methodologies (Gold (1992, 1994), Willcocks (1995), Van Grembergen and Van

Bruggen (1997), Van Grembergen and Timmerman (1998) and Van Grembergen (2000,2004)) have been applied within real world IT outsourcing environments. Also by obtaining this research data there was an opportunity for me to critically evaluate my research findings against the work of, for example, Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999), McDowall (2001) and Lacity and Willcocks (2001) who have all argued, in varying degrees, that benefits realisation arising from IT outsourcing have generally been poor.

To summarise, questioning in this area focused on benefits realisation in the following key areas:

- Comparisons between targets set and results achieved
- How have benefits been measured? (Or have benefits been measured?)
- Have any balanced scorecard techniques or methodologies been utilised?
- Are realised benefits in line with anticipated benefits?

### 4.2.2 The Research Organisations

The previous chapter has developed and defined the IT outsourcing questions that covered the full IT outsourcing lifecycle. The next logical stage of the research process was to identify appropriate organisations that had experience of, and exposure to, the IT outsourcing phenomenon who would agree to participate in this research programme. Drawing up the rationale articulated, when developing the research questions, the following criteria was deemed important when determining the research organisations to take part in this research programme.

- As the research questions covered the full extent of the IT outsourcing lifecycle, it was essential to gain maximum benefit from the research questioning, that the research organisations had experienced the full extent of the IT outsourcing lifecycle

- The same rationale applied to the interview participants, in that to gain maximum benefit from the interview sessions, the research participants had significant exposure to the full extent of the IT outsourcing lifecycle

- The interview participants were questioned on matters which are of a highly confidential, contractual and commercially sensitive nature. It was therefore a reasonable assumption that the interview participants who have exposure to matters of this nature would be senior personnel within the respective organisations

- To assist with the research programme achieving credibility within both the IT management academic and practitioner communities, the scale and complexity of the organisations IT outsourcing arrangements were of a significant magnitude to enable an in depth analysis of the IT outsourcing lifecycle

- Because this research programme involved taking an 'action orientated' approach within the Royal Mail IT outsourcing process the research organisations would provide a credible comparison (again in terms of scale and complexity) to the IT outsourcing environment faced by Royal Mail

It was anticipated that the research organisations had adopted varying approaches to entering into and subsequent management of their IT outsourcing arrangements. These approaches were critically evaluated in order that lessons learned, and indeed mistakes made were extrapolated, and where appropriate, used within the context of the Royal Mail IT outsourcing action research process.

The research criteria listed previously formed the basis for selecting appropriate research organisations, however not all research organisations approached agreed to participate in this research programme. Reasons provided for non participation were primarily that potential interview participants had insufficient time to participate in the interview sessions or that the organisations were unable or unwilling to discuss IT outsourcing issues which were of a highly sensitive contractual and commercial nature. However the following organisations agreed to participate in this research programme:

- HM Government - Department of Education and Skills
- HM Government - Employment Services Department (now part of Department of Work and Pensions)
- Rolls Royce
- Powergen
- ASDA

Because of the commercially sensitive nature of the IT outsourcing environment it was understandable that the organisations wished to treat the interview sessions in the strictest of commercial confidence. However in my role as researcher I made the observation that the organisations willingness to discuss highly commercially sensitive IT outsourcing issues, and ultimately share and benefit from the research programme findings and recommendations, was an indication that problems areas existed within their respective IT outsourcing arrangements.

All of these research organisations had been through the full extent of the IT outsourcing lifecycle. Also the organisations represented a combination of public and private sector organisations. This enabled both the public and private sector environments to be explored within the context of IT outsourcing. The IT outsourcing arrangements within these organisations ranged from values of £25 Million to £120 Million per annum with a total value in the region of £300 Million per annum. Further

the total number of IT staff transferred from 'in house' IT organisations to the external IT service providers was in the region of 2700.

The scale and complexity of the IT outsourcing arrangements is comparable in nature to the situation faced by Royal Mail who expected to enter into an IT outsourcing arrangement in the magnitude of £100 to 150 Million per annum which potentially involved the transfer of around 1000 IT personnel.

The interviews were carried out with senior IT managers within the respective organisations. These managers were selected on the basis that they had experience of, and exposure to, the full IT outsourcing lifecycle and they would be able to fully engage with the interview questions which have been developed to cover the full extent of the IT outsourcing lifecycle.

Because of the lengthy nature of the IT outsourcing lifecycle (Aalders (2001) estimated that a typical IT outsourcing process from initial consideration to completion of the IT outsourcing transition period can take typically 2 years) the managers selected had been with their respective organisations for periods in excess of this typical 2 year IT outsourcing lifecycle period. Indeed many of the managers had been with their respective organisations for periods significantly in excess of this. Therefore it was anticipated that these managers would have a wealth of IT outsourcing experience to tap into.

The questions developed earlier in this chapter formed the basis of the interview sessions with the senior IT managers. These questions were very much open in nature and therefore the interview sessions and dialogue took place on a semi-structured format. The interview sessions took place at the respective organisations premises and lasted typically 3-4 hours. To ensure that my interpretation of the interview dialogue was accurate the interviews were transcribed by myself and submitted to the interviewees for approval.

A high level summary of the output of the interview sessions with the research organisations is located in **Appendix A.**

## 4.3 The Problem Situation - Pre- IT Outsourcing

The following paragraphs summarise the interview findings with respect to the business environment / background and anticipated IT outsourcing benefits stages of the IT outsourcing lifecycle.

### 4.3.1. Business Environment and Background

The organisations were all operating within highly competitive environments and were experiencing difficulty in achieving historical levels of performance (both financially and operationally). This climate was a similar situation to the organisations that Strassman (1995) researched when he made the claim that ***'IT Outsourcing is a game for losers'***

**The IT Outsourcing Conundrum** - **The** IT outsourcing literature review had identified an IT Outsourcing conundrum in that the IT outsourcing market was experiencing rapid expansion despite strong evidence that the realised IT outsourcing benefits had been far from impressive (Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001))

The interviews highlighted the following issues:

- **History of Failure** - The interviews provided strong evidence that the organisations were aware of the ***'history of failure'*** associated with IT outsourcing. Examples cited during the interviews was the interviewees awareness of the work of Gartner (2002) and SOCITM (2001) which outlined poor benefits realisation associated with IT Outsourcing. The organisations were also aware of some of the high profile IT outsourcing failures such as Enron and Xerox.

Despite the awareness of the perils associated with IT outsourcing the interviews highlighted that the stakeholder and shareholder view was that these risks were outweighed by the potential benefits

- **Selling the IT Outsourcing Benefits** - All the organisations sought independent advice from external consultants and were advised that significant cost savings could be achieved by outsourcing IT capability (estimates ranged between 10 and 20% potential savings on IT spend per annum). This finding was consistent with the work of Morgan Chambers (2001) and Lacity and Willcocks (2001) who cited cost savings to be a major driver behind IT outsourcing

- **Stakeholder Agendas** - Some of the key business, strategic and operational drivers and therefore ***'Stakeholder Agendas'*** towards IT outsourcing were:

  - IT was regarded as ***'non core'*** to the business (this in direct contradiction to the views of for example Hatch (1997), Heydebrand (1989), Clegg (1990), Kanter, Stein and Jick (1992) who argued that IT was the ***'lifeblood'*** of an organisation

  - The overall business strategy was towards downsizing and IT outsourcing was deemed as being a 'strategic fit'. Again it could be argued that this scenario of downsizing is consistent with what Strassman (1995) termed ***'shrinking'*** and that the organisations that Strassman studied were using IT outsourcing as part of the shrinking process. British Gas, faced with privatisation, deregulation and devolution in the mid-1990's provided an example of how outsourcing is one solution to downsizing:

    ***'There is also incredible downsizing. One of the implications is you cannot do it all in house, outsourcing is needed just to meet the challenging projects, their size, our lack of resources and the short timesclales'***

Quote from British Gas IT Director (located in Lacity and Willcocks (2001))

- Perceptions existed within the organisations that IT costs were too high. This view is consistent with the work of Lacity and Willcocks (2001) who found that ***'IT is perceived by many executives to be a significant cost burden and drain on an organisations finances'***

- Some views were that IT outsourcing would create a strategic alliance or partnership with a global specialist IT supplier. It was claimed that this would assist with creating a platform to further exploit new technology and identify and deploy innovation opportunities. The opportunities associated with technology exploitation and innovation are referred to within the work of Aalders (2001)

Therefore the interviews had further provided fuel to the IT outsourcing conundrum in that although organisations were aware of the risks or history of failure associated with IT outsourcing they were prepared to bow to the selling of the IT outsourcing benefits and stakeholder agendas and go ahead with an IT outsourcing strategy. To a large extent they were embarking on an IT outsourcing strategy with what one organisation described as their ***'eyes wide open'***

### 4.3.2 Anticipated IT Outsourcing Benefits

This section critically evaluates the research findings against the seven benefits of IT outsourcing as identified by Aaalders (2001). This is detailed in the table that follows:

**Table 4.1 - The Anticipated Benefits of IT Outsourcing**

| **The Benefits of IT Outsourcing (As defined by Aalders 2001)** | **Critical Evaluation of Benefits Against the Research Findings** |
|---|---|
| ***1.0 Improves business and IT processes*** | A stated objective was to improve IT enabled business processes. Examples of these included Human Resources and Finance processes |
| ***2.0 Brings increased certainty over cost*** | The findings did not confirm a driver to be increased certainty over costs. There were however significant cost related drivers which were:<br>➢ Seeking a reduction in IT costs. All the organisations viewed their IT costs to be too expensive<br>➢ The move from a fixed to a variable cost base was a stated objective. This with the intention of creating more flexibility and being able to pass on any risks associated with peaks and troughs in IT demand<br>➢ The potential to sell off some IT assets as part of the IT outsourcing arrangement was deemed highly attractive |
| ***3.0 Improves the quality of service*** | The enhancement of IT service quality was found to be a driver. Current IT service quality was deemed to be low - although no quality / benchmarking criteria was provided to support this claim |

| | |
|---|---|
| ***4.0 Enables a company to keep pace with it's competitors*** | Interestingly no direct reference was made with respect to using IT outsourcing as an enabler to keeping pace with competitors. An indirect link was the reference to identifying innovation and technology exploitation opportunities to assist with the development and implementation of potential new products and services |
| ***5.0 Allows focus on core competency and revenue generation*** | As stated previously all the organisations viewed IT to be non-core and therefore it was deemed to be a potential for outsourcing. This is in agreement with the views of Aalders but a contradiction to the views of for example Hatch (1997), Heydebrand (1989), Clegg ( 1990), Kanter, Stein and Jick (1992) |
| ***6.0 Offers flexibility in the quantity of staff*** | As stated above in 2.0 of this table, the move from a fixed to a variable cost base was a stated objective. In addition to creating a more flexible cost base it this would also create a more flexible resourcing environment which would be able to accommodate any peaks and troughs in IT demand |
| ***7.0 Provides access to specialist skills and knowledge*** | The access to a ***'highly skilled external pool of IT expertise'*** within a post outsourcing was a stated objective. This would be particularly evident if the IT outsourcing supplier is a large global player with both IT and business capability |

In addition to the seven IT outsourcing factors identified by Aalders (2001) the organisations viewed that a potential benefit of IT outsourcing may be an opportunity to share or as one organisation stated ***'offload some of the risks associated with IT delivery'***. Many organisations cited failed IT projects / programmes and they felt that passing this responsibility to an external service provider would discharge some of the associated IT risks.

### 4.4 The Problem Situation - IT Contract Negotiation and Agreement

The following paragraphs summarise the interview findings with respect to the IT contract negotiation and agreement stages of the IT outsourcing lifecycle. Specific focus is on the findings related to the IT contract formulation and letting. This stage of the IT outsourcing lifecycle is extremely detailed and typically takes 1 year to complete (Aalders 2001). Indeed it could be argued that it would form the basis of a doctorate thesis in it's own right. For this reason, and also to prevent any distraction to the key thrust of this thesis which is to develop and apply a governance framework for IT outsourcing, the objective is to extract some of the key learning points such as selection criteria and contract principles so that they can be further applied within the overall context of this thesis.

#### 4.4.1 IT Contract Formulation and Letting

The general criteria for formulating and letting the IT contract was found to be consistent with the industry wide criteria such as the value / performance criteria as defined by Kaplan and Norton (1993). This is summarised in the table below:

**Table 4.2 - Kaplan and Norton Critical Success Criteria**

| Kaplan and Norton (1993) Critical Success Criteria | Summary of Criteria |
|---|---|
| ***1.0 Financial*** | Cost at least equal to our current level |
| ***2.0 Processes*** | Service standard at least equal to our current standard |
| ***3.0 Customer*** | Company with a presence in our target market |
| ***4.0 Learning and Growth*** | Will support our business goals in new markets. Will provide advice and guidance in markets |

In addition to the general criteria for formulating and letting of the IT contracts, the following specific criteria was identified as a result of the research:

- **Financial history and stability** - of the potential IT service provider was a criteria which all the organisations cited

- **Proven track record** - of success in the management of IT outsourcing arrangements of the respective scale and complexity that faced the specific organisations was an important factor

- **Human Resource Management** - Some of the decision-making criteria were around Human Resources management. For example the service providers were asked to provide details with respect to how the transferring IT personnel would be managed and developed (for example how personnel would be trained and provided with appropriate development opportunities)

- **Operating with a Spirit of Partnership** - The approach to how the IT outsourcing relationship would be managed was a key consideration. Some organisations stated a wish to operate ***'within a spirit of partnership'*** rather than operate within a rigid customer / supplier framework

- **Technology Exploitation and Innovation** - Other considerations included the IT service providers approach to technology exploitation and innovation and also how new service and product improvement initiatives would be identified and deployed (this is linked to Kaplan and Nortons learning and growth criteria)

**Summary of the IT Outsourcing Arrangements**

A summary of the IT outsourcing arrangements is as follows:

- The contract duration periods ranged from **5 to 10 year periods**. Some of the contracts had built in provision for extension based on achievement of set performance and operational criteria. Contract signature dates ranged from 1992 to 1999

- IT outsourcing contracts ranged from **£25 Million to £120 Million** per annum with the total IT value of all the contracts being in the region of **£300 Million** per annum

- The total number of people transferred from 'in house' to external IT service providers is in the **region of 2700**

- Two of the organisations chose a total or ***'big bang'*** IT outsourcing solution with the remaining three utilising a ***'selective'*** IT outsourcing arrangement

It is argued that the high degree of scale, complexity, and financial value of the IT outsourcing arrangements, summarised above, brings credibility to the research and analysis undertaken within this research programme.

**The issues identified with the IT Contracts**

The following statement by PA Consulting Group (in Aalders (2001)) outlined the key objectives of an effective outsourcing contract:

***'To be successful, an outsourcing contract must be sufficiently 'tight' to protect both parties from operational and commercial risks that may result, yet at the same***

*time be flexible enough to enable changes to be made to the scope of services provided'*

The interviews highlighted that this ***'flexibility'*** had not been achieved by any of the organisations and that the contractual arrangements were stated as being ***'overly complex and bureaucratic'.*** The research findings highlighted that there was significant ***'contract re-negotiation and change'*** which has proved to be an expensive and resource consuming activity. This high level of change is consistent with the views of the work of Nam, Rajagopolan and Rao (1996) that developed the ***'incomplete contract theory'.*** They argued that it is not possible to know the future contractual requirements of an IT outsourcing arrangement due to the highly dynamic nature of the IT outsourcing environment – this certainly has been evident for the research organisations.

**The Contract Principles**

The following 'best practice' contract principles were identified as a result of the research. These principles are detailed in the table that follows:

**Table 4.3 – Best Practice Contract Principles**

| Contract Principle | Rationale |
|---|---|
| ***1.0 Agree the IT Governance Framework as part of the outsourcing negotiations*** | There was an identified need for an IT governance / controlling framework (i.e. the output of this thesis).This should be developed and agreed as part of the outsourcing negotiations. |
| ***2.0 Embed a 'Shared Risk / Reward' philosophy*** | For example, if a new IT product could achieve say 20% savings on current operational costs then the savings or ***'rewards'*** would be shared between the customer and IT service provider. If the product failed to deliver the savings then the cost or ***'risk'*** associated with the failure would also be shared |
| ***3.0 Retain the Right and Access to Audit*** | Retaining the ***'right and access'*** to audit within the IT service provider has proved extremely valuable |

| | |
|---|---|
| ***4.0 Measure IT performance metrics both before and after outsourcing*** | Measure IT performance and costs before outsourcing so have accurate baseline to enable future benefits to be measured |
| ***5.0 Gain commitment to innovation and technology exploitation*** | Innovation and technology exploitation may assist with the development and implementation of new products and services that may assist with gaining a competitive advantage |
| ***6.0 Define up front accountabilities and responsibilities*** | Ensure that accountabilities and responsibilities between the customer and IT service provider are defined up front, this will prevent any future confusion |
| ***7.0 Contract Schedules to be constructed 'In House'*** | Using in house staff (supported by external consultant and contract lawyers etc) to construct contract schedules would assist with preventing any knowledge transfer issues and create a sense of ownership |
| ***8.0 Have a contract exit management strategy*** | There is a need for a ***'maintainable'*** contract exit management strategy should this need to be invoked at a future stage |

These contract principles are used later within this research programme within the context of the Royal Mail IT outsourcing arrangement.

## 4.5 The Problem Situation - IT Outsourcing Transition Period Through to Post IT Outsourcing

The following paragraphs deal with defining the problem situation with respect to the transition through to post IT outsourcing stages of the IT outsourcing lifecycle.

### 4.5.1 Retained and Service Provider IT Organisations

The research highlighted that the retained IT organisations consisted largely of a ***'Central supplier performance and contract management group'.*** This group was responsible for the 'day to day' commercial and operational interfaces with the IT service provider. The retained IT organisations were viewed as an ***'overhead'*** to the organisation and were formed on a ***'lean and mean'*** philosophy. This was consistent with the view of Thomas (2005):

***'Traditionally, the IT department has been regarded as a burden - A necessary but unwelcome drain on resources that adds little in the way of value to the business'***

The IT service provider organisations which face off to the organisation's retained IT function consisted typically of the following functional areas:

- **Service delivery and performance management** - ensures that the 'day to day' IT service is managed
- **Change management** - mainly comprising major service change and project and programme delivery
- **IT Strategy delivery** - ensures that an IT strategy is developed and deployed

The research findings are critically evaluated against the work of Lacity and Willcocks (2001) who identified the ***'Four faces'*** of an emerging post outsourcing IT organisation - namely, ***'The Business Face'***, ***'The Technical Face'***, ***'The Governance Face'*** and '***The Supply Face'***. This is detailed in the table that follows:

**Table 4.4 - The Four Faces of Post Outsourced IT Organisations**

| **The Four Faces of Post Outsourced IT Organisations. Lacity and Willcocks (2001)** | **Research Findings** |
|---|---|
| ***1.0 'The Business Face'***<br>***'Concerned with the elicitation and delivery of business requirements'*** | The ***'Business Face'*** has not emerged. There is no function that deals with the specification of business requirements or integration of IT strategy with the business strategies. The retained IT units central supplier performance and contract management groups do however have a reporting line into senior business stakeholders |
| ***2.0 'The Technical Face'***<br>***' Ensures that the organisation has access to technical capability'*** | The ***'Technical Face'*** has not emerged. The access to technical capability is arranged by the central supplier performance and contract management group who do not have the necessary technical expertise required to provide an effective interface in this area |
| ***3.0 'The Governance Face'***<br>***'Concerned with IT strategy which defines and co-ordinates the organisations IT activity'*** | The ***'Governance Face'*** has emerged via the retained IT unit's central supplier performance and contract management group. This group deals with the 'day to day' governance activities. There is however no specific function that deals with the setting and deployment of governance processes and relationships |
| ***4.0 'The Supply Face'***<br>***'Encompasses the understanding and use of IT Services'*** | The ***'Supply Face'*** is carried out by the central supplier performance and contract management group which deals with the ***'day to day'*** management of IT Services |

A common theme was that the ***'IT service*** provider's ***commitment to innovation and technology exploitation has been poor'***. There has been a significant focus by the IT service provider on driving value from existing products and services rather than putting forward future IT innovative solutions. Therefore the retained and IT organisational interfaces did not facilitate effective technology innovation and exploitation.

### 4.5.2 Governance of the IT Outsourcing Arrangement

A central issue highlighted within the interview findings was the organisations apparent ***'lack of control'*** over the IT outsourcing environment. This lack of control may be central to the ***'core controlling the periphery'*** organisation debate (Nichols 1986 and Prowse 1990) articulated previously in the IT outsourcing literature review. The literature review also highlighted the importance of IT Governance in controlling the IT outsourcing environment. This was summarised by Thomas (2005):

***'The idea of IT Governance has come about as a way of imposing order on chaos. IT Governance is about making sure that the organisations IT systems are aligned with the requirements of the business - in other words, about increasing the control the business has over it's IT capability'***

The ***'loss of control'*** issue within an IT outsourced environment was also supported by other research , including the work of Farrell (1999) Willcocks, Fitzgerald and Lacity ( 1996), Grover Cheon and Teng (1994), Gordon (1994) and Gallivan and Wonseak (2004). The following issues were identified as contributors to the organisations inadequate control over the IT outsourcing environment:

- **Lack of use of an industry standard framework** - Only one of the organisations used, albeit in part, a formal 'industry standard' controlling or process framework. This was based on the Control Objectives for

Information Technology (COBIT), which was deemed by the organisation to be *'overly bureaucratic and expensive'* (this view is consistent with the previous literature review)

- **Inadequate IT measurement and performance metrics** - Both before and after IT outsourcing

- **Poor knowledge transfer** - Between specialist IT consultants and contract specialist and the organisations retained IT structure

- **A number of key governance processes are missing** - These processes were identified primarily in the areas of **compliance , audit and risk management**

- **There was no consistent format to governance processes -** However some simple management control systems existed using , for example, the following **general management** principles:

    - **Setting Direction -** By for example formulating an IT strategy which provides direction to the IT service providers

    - **Managing Direction -** Contains processes for the 'day to day' management of the IT service providers

    - **Changing Direction -** Deals with the changes required to IT service provision

- **There was a lack of clear accountabilities, responsibilities and decision making rights between the customer and IT service provider organisation** - This resulted in an inability to create a clear direction for the relationship to operate within

- Some of the **key controlling governance processes** identified, enforced through contract clauses, were with respect to the customers **reserved powers and rights.** These ensured that the customers were able to exercise some control over the IT supplier through enforcing contractually agreed reserved rights (for example input into the selection of sub contractors and choice of technology)

- **IT policies and standards** were also found viewed to be a key control mechanism. This ensured that appropriate direction was set , managed and changed .The IT policies and standards were derived from publicly available IT industry sources such as the Office of Government Commerce (OGC) and the IT Infrastructure Library (ITIL)

To summarise the governance research findings, the IT outsourcing customers have found that governing or controlling an external IT outsourcing highly contractual and commercial arrangement is a fundamental shift from the previous internal IT service provision. To summarise a customers view was that they were ***'fighting an uphill battle'***

### 4.5.3 Relationship Management and Interfaces

The relationship management interfaces are a key mechanism in determining the ***'degree of alignment'*** and ***'level of intimacy'*** between the customer and IT services provider. McKeen and Smith (2001) proposed six key questions that assist with determining the ***'degree of alignment'*** and ***'level of intimacy'*** within a contractual relationship. These six questions are critically evaluated against the research findings in the table that follows:

**Table 4.5 – The Determinants of Degree of Alignment and Level of Intimacy**

| McKeen and Smith (2001) Determinants of *'Degree of Alignment'* and *'Level of Intimacy'* | Research Findings |
|---|---|
| ***1.0 Do they understand your business?*** | None of the organisations had formal mechanisms to ensure that their business strategy was aligned with their IT strategy. Ad hoc or informal processes and dialogue had failed to achieve the desired level of strategic alignment |
| ***2.0 Do they have the same priorities?*** | The commercial and service review meetings in some cases have proved to act as a ***'panacea for all issues'*** and have therefore acted as a 'bottleneck' within the context of the relationship. This ***'bottleneck'*** has an implication that the ***priorities*** with the context of the overall relationship have not been understood |
| ***3.0 Do they understand the 'non specified' issues?'*** | Some of the organisations used IT balanced scorecards to assist with the overall management of the relationship. These IT balanced scorecards contained ***'specified'*** measures relating to financial performance, effective relationship management, operational performance, project/programme management and change management. The balanced scorecards did not however take into account any ***'non specified issues'*** |
| ***4.0 Do they have the urgency?*** | The research highlighted that the ***'urgency'*** within the relationships is based on individual rather than collective organisational objectives and goals |
| ***5.0 Do they anticipate what you need?*** | A key theme was that the relationships with the IT suppliers had become increasingly contractual, this as opposed to some of the organisations original thinking that the relationship should be based on mutual collaboration, partnership and trust. The relationships were based on working on a reactive basis rather than ***'anticipating any future needs'*** |
| ***6.0 Do they care for your budgetary constraints?*** | The research highlighted that the focus of the IT service providers has been on obtaining maximum budgetary value (i.e. maximising their own profit rather than ***'caring for budgetary constraints'***) from existing IT products and services. This has been at the expense of identifying and deploying any opportunities associated with innovation and exploitation of new technology |

The analysis in the previous table highlights that the ***'level of intimacy'*** between the customer and IT service provider is low. It has previously been argued that achieving a high ***'level of intimacy'*** will provide an opportunity to build ***'trust'*** into a relationship. ***'trust'*** is a basic concept of ***'social exchange'*** theory, and is one of the most desired qualities in any close relationship (Anderson and Narus 1990, Ganesan 1994, Henderson 1990, Sabherwal 1999 and Kim and Lee 1999). Therefore there appears to have been a lost opportunity to build a high ***'level of intimacy'*** and therefore ***'trust'*** into the IT outsourcing relationships.

The literature review highlighted the importance of having effective IT outsourcing change management mechanisms in place (Farrell 2002) and Morgan Chambers (2002)). The key change management mechanisms were found to be as follows:

- Projects and programmes were a key change mechanism that deliver change in terms of providing new IT systems. However, the research also identified change was required in the following areas:
  - To facilitate major changes to existing IT services
  - To facilitate changes to the IT service contract
  - Technology innovation and exploitation was viewed to be a key change mechanism. However as previously highlighted the IT service providers commitment and performance in this area has been poor
- The communications interfaces between the customer and IT service provider were a key change enabler. There was, however, room for improvement in this area with a self confessed tendency to communicate in silos

The general view was that the change mechanisms in place were ***'inadequate'*** to deal with a dynamically changing and highly commercial IT outsourcing environment.

## 4.6 The Problem Situation - Post IT Outsourcing

The following paragraphs summarised the interview findings with respect to the IT Outsourcing benefits realisation stage of the IT outsourcing lifecycle.

### 4.6.1 IT Outsourcing Benefits Realisation?

The external organisation research highlighted that the post IT outsourcing experience for the organisations has been one of poor business benefits realisation. To enforce this point, two of the participating research organisations chose to reverse their IT strategies and in source their IT capability. This finding enforced the work of various other studies, which have argued that IT Outsourcing did not provide the anticipated business benefits realisation. Examples of these studies include the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001).

An issue for some of the organisations was that inadequate IT service performance and financial metrics were taken in-house **before** entering into the IT outsourcing arrangement. This made any subsequent post IT outsourcing benefits realisation measurement extremely difficult to administer.

No specific balanced scorecard methodologies were applied but general scorecards existed that measured financial, operational / system performance and some customer satisfaction measures were in place. Therefore the balanced scorecard concepts (Gold (1992, 1994), Willcocks (1995), Van Grembergen and Van Bruggen (1997), Van Grembergen and Timmerman (1998) and Van Grembergen (2000, 2004)) were partly applied but not using any degree of rigour.

The relationships with their IT service providers in some cases appears to have been built on ***'conflict'*** rather than ***'partnership'***. The interviews provided evidence that relationships between customer and IT service provider were ***'highly contractual'*** and in some cases ***'overly bureaucratic'***.

The IT service providers were seeking to drive short term value from existing IT products and services rather than looking to more long term IT exploitation and innovation opportunities that the customers had hoped for when entering into the IT outsourcing arrangement.

There was also evidence of dual forces present with the customers striving to achieve their anticipated IT outsourcing business benefits and the opposing force of the IT service providers operating in a highly commercial and contractual manner in an attempt to drive their own business benefits from the IT outsourcing arrangements.

Where adopted the ***'shared risk/ reward'*** philosophy (referred to previously) was stated to have ***'proven to be a success'***. Evidence was provided where both the customer and IT service provider were able to share the ***'rewards'*** arising from successful joint IT service and product improvement initiatives.

The lack of effective and efficient governance and controlling processes has meant that many of the organisations cited a ***'loss of control'*** over the IT outsourcing environment. This ***'loss of control'*** was deemed to be a key factor in poor IT outsourcing benefits realisation.

The poor benefits realisation resulted in the organisations view that their IT outsourcing experience had proved to be, as one organisation stated:

***'An expensive way of saving money'***

### 4.7 Information Technology Outsourcing - Rich Picture Construction

The previous paragraphs summarised the key research findings arising from the interviews with the research organisations, the following paragraphs will now explain how SSM was utilised to further articulate and analyse the IT outsourcing problem situation.

An objective of this research programme was to take an holistic rather than reductionist view of the IT outsourcing problem situation. A facilitative device, as defined within the SSM methodology to assist with creating an holistic view of a problem situation, is the utilisation of a rich picture. To enforce this view, Checkland (2001) articulated the role of rich pictures within the context of research programmes:

***'Pictures can be taken in as a whole and help to encourage holistic rather than reductionist thinking about a situation'***

Rich pictures are also regarded to be a useful device when utilised as a starting point for exploratory discussions:

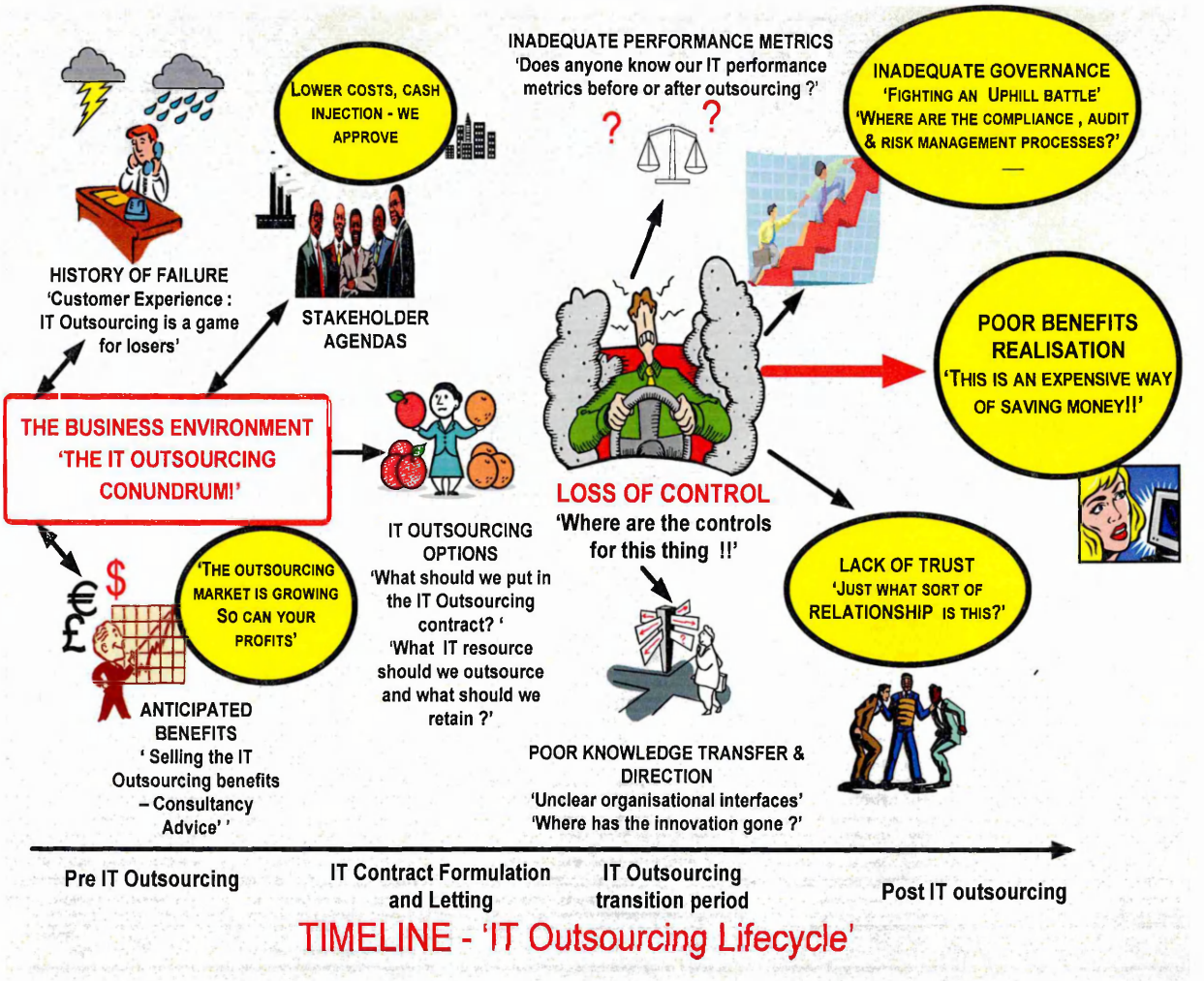
***'As far as use of rich pictures is concerned, we have found them invaluable as an item which can be tabled as a starting point of exploratory discussions with people in a problem situation'***
Checkland (2001)

Within the context of this action research programme the ***'people in a problem situation'*** are the key stakeholders within Royal Mail who were considering the adoption of an IT outsourcing strategic approach. By constructing a rich picture as a ***'starting point for exploratory discussions'*** this enables the key stakeholders to be brought up to speed and educated with what is perceived to be the IT outsourcing problem situation.

The rich picture that follows was constructed by extrapolating the common research findings from the interviews carried out with the respective organisations which had

experience of the IT Outsourcing environment, as well as drawing upon the key research findings arising from the outsourcing and IT outsourcing literature reviews:

**Figure 4.3 Rich Picture - IT Outsourcing**




The IT outsourcing rich picture was constructed over a time line, which represents the IT Outsourcing Lifecycle. This spans from an organisations initial IT outsourcing considerations to the situation in a post-outsourced environment.

A further reason for constructing an IT outsourcing rich picture was, in my capacity of programme researcher, to create a ***'facilitative device'*** which assisted with shaping and informing subsequent IT outsourcing discussions with key stakeholders within Royal Mail.

### 4.8 The Royal Mail Research Programme Team

At this stage of the research programme it was necessary to engage a **Research Programme Team.** This team consisted of Senior IT managers from each of the Royal Mail business units (namely Royal Mail UK, Logistics and Contracts Distribution, Post Office Limited and Parcelforce Worldwide). The team also included Senior IT managers working within the commercial management and strategy development areas of Royal Mail. The roles and key objectives of the Research Programme Team were as follows:

- The Research Programme Team was used as a mechanism assist with developing and to challenge the concepts, constructs and frameworks which were developed and deployed throughout the research programme. This was carried out with a key objective of gaining more precision and assurance with respect to the overall research process

- The action research programme was based on the 'real world' IT outsourcing process within Royal Mail. From a practical perspective it was therefore necessary to engage, and obtain 'buy in', from a team of Royal Mail employees who were key stakeholders within the Royal Mail IT outsourcing process

- A key issue was that the Research Programme Team members would be responsible for assisting with the implementation of the research programmes proposals and therefore it was critical that they were engaged and supportive of the proposals. This engagement enabled my research

proposals to be vetted from a practitioner perspective. Further, the Research Programme Team was requested to assist with the development and to approve my research proposals for implementation within the Royal Mail 'real world' IT outsourcing environment. This implementation enabled my theoretically derived thinking to be tested within a practical environment

- The Research Programme Team members were requested to attend 2 hour meetings which took place on a fortnightly basis. These meetings took place over a period of 3 months which enabled the research programmes proposals to be developed and be ready for deployment. Specific workshop sessions were also held to provide specific focus on developing systems derived models and thinking, these are detailed later in this thesis

In addition to the Research Programme Team, interfaces were also agreed with the formal project and programme teams who were also involved with other areas of the IT outsourcing process within Royal Mail. These project and programme teams comprised of senior management within Royal Mail as well as external consultants and lawyers who were involved in the contractual and legal aspects of the IT outsourcing contractual formulation and negotiation process. The research proposals, which were developed to address the Royal Mail IT outsourcing environment and problem situation, would be provided with formal approval by the project and programme teams before implementation.

## 4.9 The Royal Mail IT Outsourcing Problem Situation

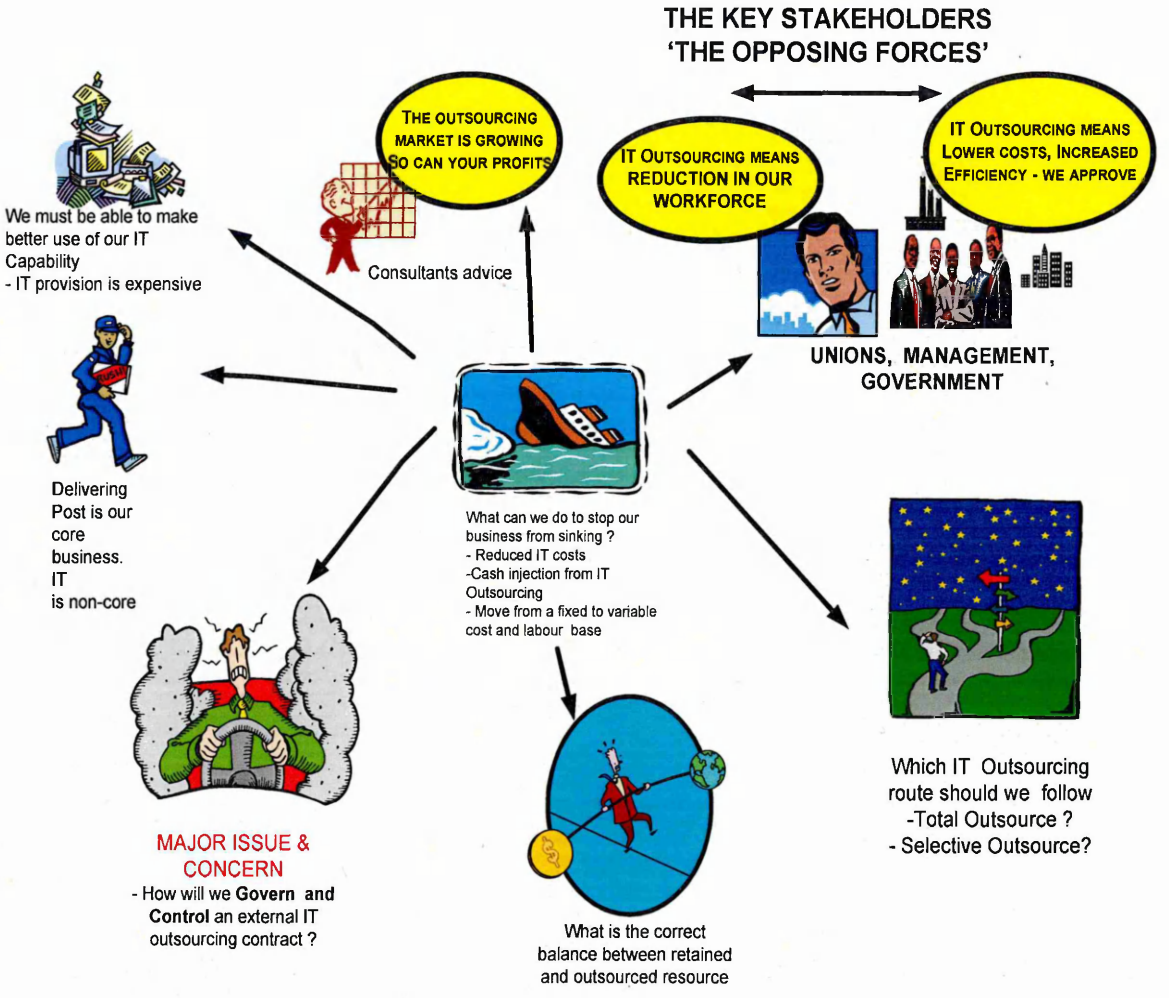
The next stage in the research process was to utilise the knowledge gained through defining the general IT outsourcing problem situation within the specific context of the Royal Mail IT outsourcing environment and problem situation. To assist with enabling the IT outsourcing problem situation within Royal Mail to be constructed, the Research Programme Team were engaged in a workshop session to assist with defining the Royal Mail IT outsourcing problem situation.

An initial task was for me to educate and advise the Research Programme Team on the key findings and outputs of the research programme to date. This involved articulating the details of the key findings of the outsourcing and IT outsourcing literature reviews as well as providing a summary of the key findings and outputs arising from the interview sessions carried out with the organisations previously identified.

The IT outsourcing problem situation rich picture, constructed previously, was also utilised as a facilitative device to assist with the dialogue and understanding of the IT outsourcing issues and concerns. Feedback from the Research Programme Team was that this rich picture of the IT outsourcing problem situation served as a useful representation of the IT outsourcing issues and concerns that Royal Mail had to address.

The workshop involved me leading the Research Programme Team in constructing a rich picture of the specific IT outsourcing problem situation within Royal Mail.
The Royal Mail IT outsourcing rich picture which was constructed is detailed in the figure that follows:

**Figure 4.4 - Rich Picture - The Royal Mail IT Outsourcing Environment**




At the centre of the rich picture are the major business issues that Royal Mail were facing. At the time of considering the option of IT outsourcing Royal Mail was a failing business that was making a loss in the region of £1 Million per day. They had also recently announced a business need to reduce their workforce by a minimum of 10,000 employees. Some of the key drivers cited at the time by the Research Programme Team (and indeed the Royal Mail Board) around IT outsourcing were deemed extremely attractive in the current business climate. Some of the key Royal Mail IT outsourcing motives and drivers were as follows:

- A potential reduction in IT operational costs

- A potential cash injection into the business by sale of some IT assets to the IT service provider

- The move from fixed to variable cost and labour bases through IT outsourcing. The potential transfer of around 1,800 IT employees to an IT service provider was viewed to have a high level of strategic fit with the overall Royal Mail requirement to reduce numbers of employees

The IT outsourcing literature review had highlighted the importance of an organisation knowing its motives behind adopting an IT outsourcing strategic approach. For example, Aalders (2001) argued that organisations need to be fully aware of their 'motives' for IT outsourcing. Some examples cited by Aalders included:

***'Intuition - 'It felt like the right thing to do''***
***'Fear - 'Our IT was sliding into a black hole''***
***'Imitation - 'We needed to keep pace with the market''***
***'Frustration - 'Our IT was driving us mad''***

Neither myself, nor indeed Aalders, were of the opinion that the above constituted legitimate motives to undertake an important business decision to undertake IT outsourcing. However, the motives cited above served to demonstrate the need for an organisation to know its legitimate motives and drivers with respect to IT outsourcing.

An issue, arising from the IT outsourcing literature review, of the value of organisations such as Royal Mail defining and understanding its motives behind IT outsourcing was further debated with the Research Programme Team. The outcome of this debate was an agreement that there was a need to delve deeper than the

immediately obvious and well publicised Royal Mail IT outsourcing motives and drivers cited above.

This detailed understanding of the Royal Mail IT outsourcing drivers and motives formed a valuable input into the future stages of this research programme. Also the motives when fully defined formed a **baseline** which was used as a future comparison of what future benefits may have been realised within a Royal Mail post IT outsourcing environment.

In order to define the Royal Mail motives for IT outsourcing there was an opportunity, during the workshop session, to draw upon, and indeed build upon, the work of Baldwin, Irani and Love (2001) who articulated four categories of motives for IT outsourcing decisions. These four categories along with supporting rationale were summarised as follows:

- ***'Strategic and Organisational'*** - Examples cited included focusing on core business , restructuring ( i.e. downsizing) or gaining access to high quality IT services and skills

- ***'Political'*** - This could be for reasons of changing government legislation or an attempt to resolve internal conflicts

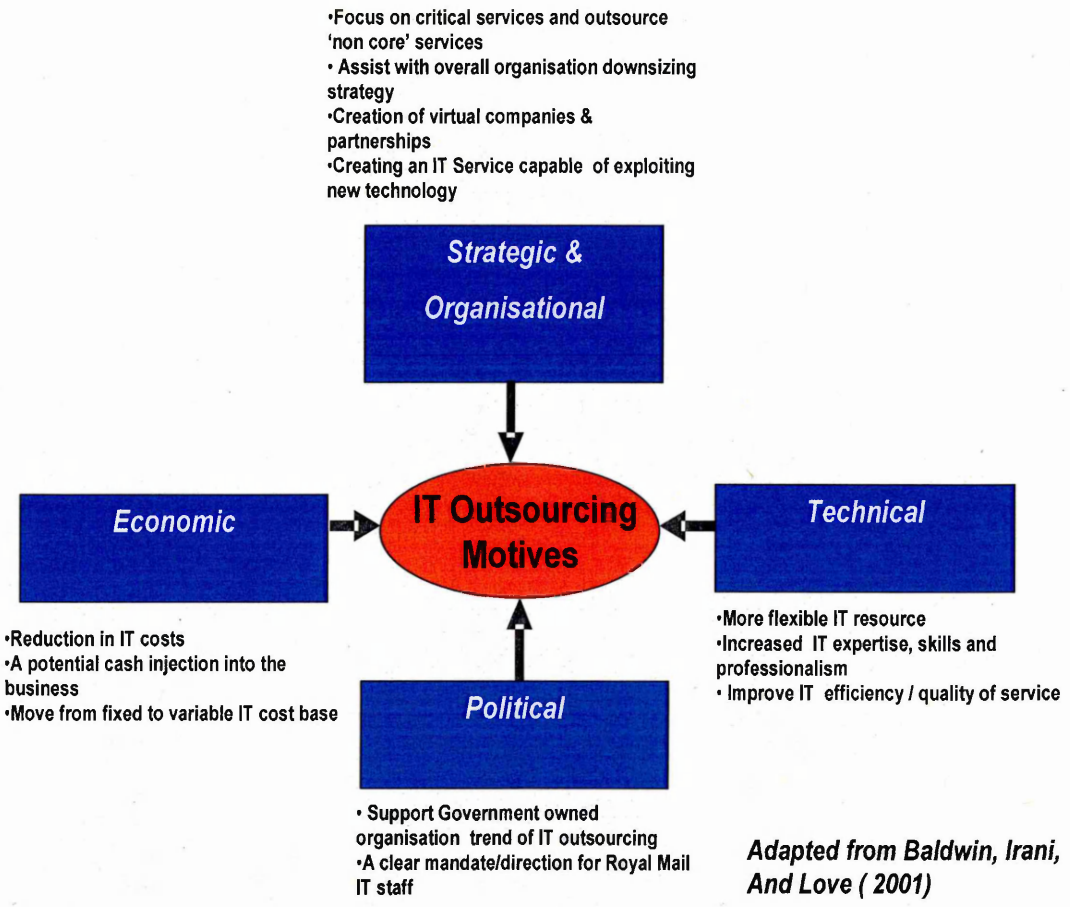
- ***'Technical'*** - This may be the perceived poor performance of internal IT staff or the need to have access to better quality IT services and expertise

- ***'Economic'*** - Reasoning for this may be to reduce IT costs or to have greater control over IT costs

The four motives developed by Baldwin, Irani and Love (2001) were utilised as the constructs for the debate with the Research Programme Team to facilitate the

construction of a model, which contained the Royal Mail IT outsourcing motives. The output of this debate is contained in the figure that follows:

**Figure 4.5 - The Royal Mail IT Outsourcing Motives and Anticipated IT Outsourcing Benefits**




The model constructed represented a way of ordering and visualising the complex IT outsourcing environment faced by Royal Mail. It also served as a useful model and analytical tool, which may be of use to other organisations who are considering IT outsourcing. As detailed previously, the motives and anticipated IT outsourcing benefits contained within this model formed a baseline which could be used later as a future comparison of what benefits may have been realised within a Royal Mail post IT outsourcing environment.

The Royal Mail IT Outsourcing rich picture contained the Royal Mail board held view that IT is non- core and that delivering post and packages is the core business. Drawing upon the work of Lacity and Willcocks (2001) the Research Programme Team provided useful input into the positioning of Royal Mail IT provision what Lacity and Willcocks have described as ***'The Business Factors Matrix'***. There was agreement within the Research Programme Team that IT within Royal Mail according to the business factors matrix should be classified as a ***'critical differentiator'***. The definition of a critical differentiator, within the context of an IT service, was defined by Lacity and Willcocks (2001) as:

***'IT activities, which are not only critical to business operations, but also help to distinguish the business from its competitors'***

Interestingly Lacity and Willcocks argued that an organisation should in source ***'critical differentiators'***. This was not the case for Royal Mail who challenged the rationale of Lacity and Willcocks and planned to outsource their IT capability.

Further dialogue with the Research Programme Team highlighted the perception within Royal Mail that as shown on the rich picture, ***'Royal Mail should be able to make better use of its IT capability'*** and that internal IT provision within Royal Mail was viewed to be ***'expensive'***. Interestingly, this issue was also highlighted within the interview sessions with the IT organisations that had embarked on an IT outsourcing route.

The rich picture also details that Royal Mail, in common with the external organisations researched, had also sought early advice from specialist IT outsourcing consultants on the potential benefits from IT outsourcing. This early advice provided a confirmation of the consistent messages obtained from the interview sessions with the external organisations that potentially 10 to 20 % savings per annum of IT spend could be achieved by outsourcing IT. These potential savings were an attractive proposition bearing in mind Royal Mail's business and financial pressures.

The rich picture also highlighted the tensions and conflict between Royal Mail senior management, the Government and the unions representing the employees within

Royal Mail. Royal Mail senior management (based on a strong governmental steer) had significant business imperatives to ensure IT outsourcing took place whilst the unions saw IT outsourcing as ***'privatisation through the back door'.*** The unions also realised that if IT outsourcing took place they would be left with significantly less union membership within Royal Mail as IT staff will transfer across to the IT service provider. Other sensitivities to be managed throughout the IT outsourcing process were the terms and conditions that staff would potentially transfer to the IT service provider. The unions saw it as imperative to ensure that existing terms and conditions of transferring employees were maintained.

A debate took place with the Research Programme Team with respect to the following key question:

### *Should Royal Mail outsource IT?*

As stated earlier, and in common with the research findings from the external organisations interviewed, because of the significant business pressures and imperatives in support of IT outsourcing, coupled with the strong steer from the Royal Mail board the debate was not around **if** Royal Mail should outsource IT but **when and how** Royal Mail should outsource IT. There was an awareness of the potential risks of IT outsourcing. However, the views held by the Royal Mail board and to a large extent the Research Programme Team were that the potential benefits from IT outsourcing would outweigh the potential risks.

Significant debate took place with the Research Programme Team around what IT resource should be retained in order that the IT outsourcing environment could be managed. Examples of IT outsourcing choices such as ***'total'*** or ***'selective'*** outsourcing (Lacity and Willcocks 2001) would have implications on what resource should be retained. The summarised output of this resource debate was as follows:

- The right balance should be achieved to ensure that sufficient and appropriate IT resource is retained internally to ensure that the IT contractual arrangements can be effectively and efficiently managed whilst guarding against retaining too much IT resource which may create an expensive and unaffordable overhead

- The retained IT resource should be appropriate to the type of IT service contract. For example the view was that more resource may be required to manage a complex ***'total'*** outsourcing arrangement than a ***'selective'*** arrangement which has only outsourced elements of IT capability

A central issue was also highlighted with respect to how the Royal Mail IT outsourcing environment is ***'governed and controlled'***. Again, this lack of control debate was linked to the ***'core controlling the periphery'*** organisation debate articulated by Nichols (1986) and Prowse (1990).The concerns raised were that the governance and control of a highly commercial IT outsourcing contractual arrangement would be a far cry from the internal IT environment that currently existed within Royal Mail.

To summarise this Chapter, there was broad agreement within the Research Programme Team that existing systems and processes utilised to manage the internal IT environment would not be appropriate or adequate for an external IT outsourced environment. Therefore this research programme's future systems thinking design and application would address the fundamental shift from a internal IT provision to an external highly commercial and contractual IT outsourced environment.

# Chapter 5

# Design of an Information Technology Governance Framework

## 5.1 SSM STAGE 2: Systems World - Purposeful Activity Models and Systems

The previous chapters have identified a requirement to consider the development of models and systems that would enable effective ***'control'*** over an IT outsourced environment. The work of Sherer (2004) highlighted the role of IT Governance in assisting with ***'directing and controlling'*** an IT outsourced environment:

***'IT Governance is the system of structures and processes for directing and controlling Information Systems'***

The development and construction of the system of structures and processes which Sherer (2004) defines as ***'IT Governance'*** provided a key focus for this research programme. These structures and processes (defined in SSM terminology as activity models and systems) were developed with the objective of exercising appropriate ***'governance and control'*** within an IT outsourced environment. In line with the terminology used by Sherer (2004) and reflecting the systems (or systemic) approach adopted the thesis title emerged as follows:

## *'A Systemic Governance Framework for Information Technology Outsourcing'*

The following paragraphs of this thesis deal with the design of the Systemic Governance Framework for Information Technology Outsourcing within Royal Mail. The design was carried out with the Research Programme Team who provided input and assurance into the concepts and constructs that were put forward. The engagement with the Research Programme Team took place over the 3 months period that the team was in place. At each of the engagement meetings (held fortnightly) an agenda item was held which dealt with taking input and providing assurance on the design and application of the Governance Framework. The design stage followed a logical (or step by step) flow which is detailed in the paragraphs that follow.

## 5.2 Systemic Design of an Information Technology Governance Framework

Before any models and systems were developed and constructed, it was useful for me to take stock with respect to what might constitute an appropriate Governance Framework to address the IT Outsourcing problem situation. This was achieved by constructing what is described within the SSM methodology as a ***'root definition'*** for the overall ***'system'*** which will constitute the Governance Framework. As a means of clarification, the formal definition of a ***'system'*** is:

***'A group of things or parts working together or connected in some way to form a whole'***
Patching (1994)

The value of constructing an overall system root definition was that I was able to describe, in a non mechanistic manner, what the overall system should be, what it aims to achieve, who are the persons affected by it, and who would be part of it.

Also by constructing a root definition, it enabled a simplistic, consolidated and reflective view to be constructed from the knowledge I had gained from the outsourcing and IT outsourcing literature reviews and the outputs from the interview sessions with the organisations that have experience of IT outsourcing.

The construction of root definitions involves utilising what Checkland (2001) has termed the **CATWOE** criteria (i.e.**Customers**, **Actors**, **Transformation**, **Weltanschauung** (defined as the ***'Worldview'***), **Owners** and **Environmental Constraints).** The following root definition was constructed with the **CATWOE** criteria included:

***'A system developed and deployed as part of this research programme by the author in the dual capacity as practitioner (Head of Governance within Royal Mail) and academic (Part time Doctorate in Business Administration Student). (My role was as both Owner and Actor)***

*This system will be named the IT Governance Framework and will be operated by IT professional and support staff (Other Actors) for the Technology Services department within Royal Mail Group (Customers)*

*The IT Governance Framework will enable effective governance over the IT outsourcing relationship (Transformation) with the IT services provider with a key objective of achieving effective 'control' over the IT outsourcing environment*

*The IT Governance Framework will operate within the context of the overall Royal Mail business and operational environment (Environmental Constraints)*

*An objective is that this IT Governance Framework, when developed and deployed, will represent an original contribution to knowledge and professional practice. It is envisaged that the IT Governance Framework will be of use to both academics and practitioners who have an interest in IT Outsourcing and Governance (Potential Future Actors)*

*Research findings have highlighted that an IT outsourcing environment is potentially problematic and hostile and that inadequate control over IT service providers have historically proved to be costly for organisations - both 'financially and emotionally' (Weltanschauung)'*

Note - That all future sub system root definitions will contain the same **CATWOE** criteria relating to the overall system description provided above.

Having constructed the root definition of the overall system the next step in developing the overall IT Governance Framework was to address the key ***'control'*** (i.e. lack of control over the IT outsourced environment) issue which was referred to within the root definition and has been evident through carrying out the IT outsourcing literature review and research within organisations who have experience of and exposure to IT outsourcing.

As a starting point to address the central ***'control'*** issue I initially drew upon evidence from the external interview sessions where some organisations had in place a very simple management control systems which consisted of the following:

- **Setting Direction** - By, for example, formulating an IT strategy which provides future direction to the IT service provider

- **Managing Direction** - This is the day to day management of, and interface with, the IT service provider

- **Changing Direction** - This deals with changes required to the IT service provision

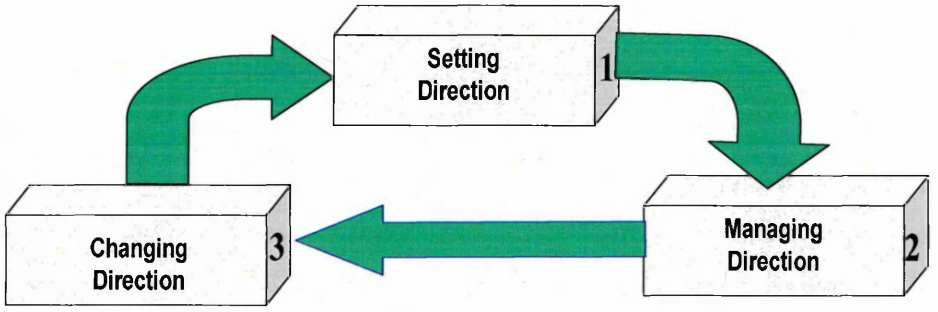
This simple management control system is what Checkland (2001) would define as a ***'control mechanism'*** which in this case dealt with controlling the IT outsourcing environment.

The method I adopted in building a system from simple and easily understandable constructs is also endorsed by Patching who argued that the minimum necessary activities should be utilised to achieve the desired ***'transformation'***. The transformation I wished to achieve is articulated within the overall system root definition in that:

***'The IT Governance Framework will assist with enabling effective governance over the IT outsourcing relationship'***

The simple management control mechanism that formed the starting point of the overall Governance Framework construction is contained in the figure that follows:

**Figure 5.1 - A Simple Management Control Mechanism**




Steps 1-3 - A Simple Management Control Mechanism

The next logical step in the design of overall construction of the system was to build on this simple management control mechanism and develop the three control areas which were used as the core **building blocks** or **sub systems** for the overall system which constituted the IT Governance Framework. This is detailed in the paragraphs that follow.

### 5.2.1 Control Area 1 - Setting Direction

The external research has highlighted that some of organisations had formulated an IT strategy to provide future setting of direction to the IT service provider. The research had however highlighted that the IT strategies were not always aligned with the organisations business strategies.

The literature review highlighted evidence of the importance of ensuring alignment or ***'fusion'*** of ***'business'*** and ***'IT strategies'*** (Van Grembergen (2002), Chan, Huff, Barclay and Copeland (1997), Brancheau, Janz and Wetherby (1996), Plowman (1998) and Farrell (2003)).

The external organisation research highlighted the importance of having effective IT policies and standards, organisational accountabilities and responsibilities and appropriate levels of IT skills and professionalism. The research also identified that organisations who adopted a ***'shared risk / reward'*** philosophy with their IT service providers enjoyed some success with this approach. The following sub system root definition was formulated as an aid to articulating what the setting direction sub system set out to achieve:

***'A sub system which will enable the alignment and fusion of the Royal Mail business strategy and drivers with the IT strategy. The IT service provider should understand, be integrated with, and be fully aligned with the Royal Mail Business and IT strategic direction***

***Further this sub system will ensure that the necessary IT policies and standards, organisational accountabilities and responsibilities and appropriate levels of IT skills and professionalism are in place within the IT outsourced environment***

***Finally to assist with ensuring an effective customer / supplier relationship, common objectives will be based on a 'Shared Risk / Reward' philosophy'***

Because this sub system is primarily dealing with strategic direction the sub system was renamed as: **Sub System 1 – Setting Strategic Direction**

### 5.2.2 Control Area 2 - Managing Direction

The external research highlighted the importance of managing the direction of the IT service provider. The research demonstrated that the organisations attempted to achieve this management of direction by ensuring that appropriate IT performance and service management interfaces were in place between the retained customer IT organisation and the IT service provider.

The interfaces should ensure that effective and efficient IT performance and service management transactions can take place. The external research highlighted some examples of customer / IT service provider transactions which may include monitoring of the performance of the IT service provider against agreed contractual requirements, IT service specifications and service level agreements (SLA's).

The service management interface is a key mechanism where the dialogue or ***'social exchange'*** occurs between the customer and the IT service provider. Therefore, the service management interface is a mechanism where ***'trust'***, a basic concept of social exchange theory, may be developed between the customer and the IT service provider. The literature review articulated that ***'trust'*** is one of the most desired qualities in any close relationship (Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999)). The service management interface may also relate to what McKeen and Smith term the ***'level of intimacy'*** between the customer and IT service provider. McKeen and Smith argue that achieving a ***'level of intimacy'*** will provide an opportunity to build ***'mutual benefit and trust'*** into a relationship.

The external research also highlighted the importance of having effective commercial interfaces and communications between the customer and IT service provider organisations. The following sub system root definition was formulated as an aid to articulating what the managing direction sub system set out to achieve:

***'This sub system will enable the appropriate IT service management and delivery interfaces to be achieved with the IT service provider. This will ensure that the day-to-day IT service management and delivery transactions with the IT service***

***provider are effective and efficient. This subsystem will seek to assist with creating a relationship with the IT service provider which is based on mutual benefit and trust.***

***This sub system will also incorporate effective effective commercial interfaces and communications between the customer and IT service provider organisations'***

Because the managing direction sub system is primarily dealing with IT service management and delivery, the sub system was renamed as: **Sub System 2 - IT Service Management and Delivery.**

### 5.2.3 Control Area 3 - Changing Direction

The external research highlighted that the IT outsourcing environments were subject to continual and dynamic change. This view is confirmed by Morgan Chambers (2002) who argued that:

***'IT outsourcing is one continuous change process from the very outset of the concept to the final contract termination or renewal and beyond'***
Morgan Chambers (2002)

The external research highlighted that projects and programmes may deliver change in terms of delivering new IT systems, however, the research also identified change is required in the following areas:

- To facilitate major changes and improvements to existing IT services
- Changes and improvements to the IT service contract

The previous external organisation research has highlighted that innovation and technology exploitation is viewed to be a key change mechanism within an IT

outsourced environment. However the research findings highlighted that the ***'IT service provider's commitment to innovation and technology exploitation had been poor'.***

This view provided support to the research by Gartner (2002) and Meta (2002) who also highlighted that the commitment to new technology innovation and exploitation between a customer organisation and outsourced company has generally been poor, bearing in mind that innovation and technology exploitation is a key change mechanism.

The following sub system root definition was formulated as an aid to articulating what the changing direction sub system set out to achieve:

***'A sub system which will ensure that effective IT change management mechanisms are in place. The required IT change, in terms of delivering new IT systems may be delivered through project and programmes.***

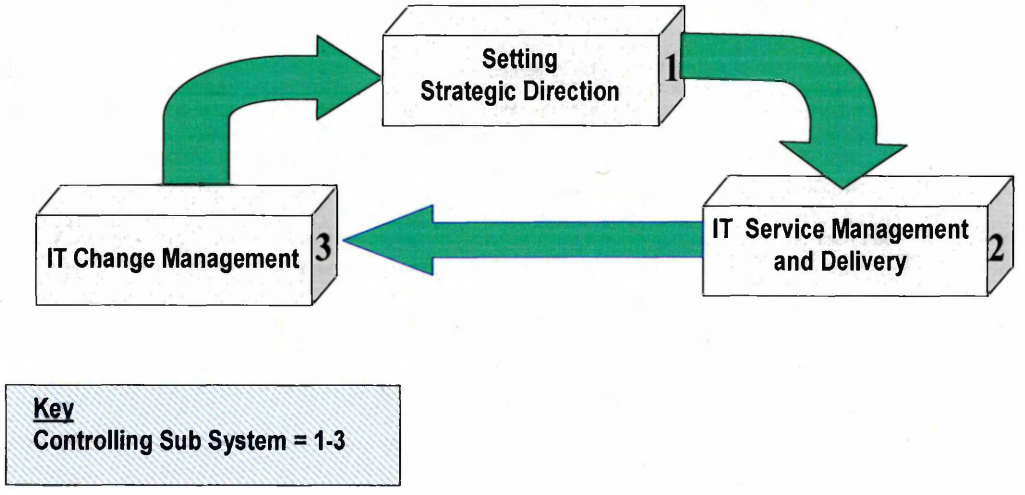
***Change mechanisms are also required to deal with changes and improvements to the IT Service and the IT Service Contract.***

***It is also envisaged that new technology innovation and exploitation initiatives will be a significant IT change driver'***

Because the changing direction sub system is primarily dealing with IT change management (accepting that this is within the wider context of business change) the managing direction sub system was renamed as: **Sub System 3 – IT Change Management**

The three renamed sub systems are all what Checkland (2001) would term ***'control mechanisms'*** and are detailed in the figure that follows:

**Figure 5.2 - The 3 Renamed Controlling Sub Systems**




The three controlling sub systems were developed to address the central control (or rather lack of control) issue evident from the external organisation research and literature review.

The external organisation research and literature review highlighted that the business benefits realisation arising from IT outsourcing have generally been poor. To address this concern it was necessary to develop some form of sub systems that are able to **monitor** the effectiveness of the controlling sub systems and the IT outsourcing environment, thereby assisting with IT outsourcing benefits realisation.

### 5.2.4 Development and Construction of the Monitoring Sub Systems

This paragraph deals with the development and construction of the monitoring sub systems. The literature review demonstrated the requirement to link IT governance with business performance and benefits. This is articulated by Gerrard (2003):

***'IT managers must present a strong case for IT governance by demonstrating its link to improved business performance, or senior business management will regard IT governance as an ' IT activity' and deny it the priority and support it needs'***

In the context of this research programme the ***'improved business performance'*** will be demonstrated by realising the benefits from the IT outsourcing arrangements that Royal Mail, and indeed other organisations, may enter into.

The external research highlighted the importance of having some form of strategic contract review in place to monitor the effectiveness and benefits of the IT outsourcing arrangement. The following sub system root definition was formulated as an aid to articulating what this sub system set out to achieve:

***'A sub system which will enable the anticipated IT outsourcing benefits to be specified and subsequently managed and monitored to assist with ensuring IT outsourcing benefits realisation***

***This sub system will incorporate a strategic contract review mechanism which will monitor the effectiveness and benefits of the IT outsourced arrangement''***

This subsystem is primarily concerned with ensuring effective benefits management over the IT outsourcing environment and was named: **Sub System 4 - Benefits Management**

The literature review had also highlighted that achieving **compliance** is a key monitoring element of the Control Objectives for IT (COBIT) methodology which has been previously detailed.

However, the external research also highlighted that some of the organisations to some extent disregarded compliance as being part of their responsibilities. They put the onus on the IT service provider to comply with customer requirements which were set out in, for example, the contract schedules and service/product specifications. As a result any failure to comply (with, for example, agreed IT strategies and supporting IT policies) by the IT service provider were found ***'after the event'***. To address the issue of compliance the following root definition was formulated as an aid to articulating what this sub system set out to achieve:

***'A sub system which will ensure that the IT service provider fully complies with the overall requirements of the IT Governance Framework. This will include compliance by the IT service providers with all the agreed IT strategies and the supporting IT policies'***

This sub system is primarily concerned with ensuring compliance over the IT outsourcing environment and was named: **Sub System 5 - Compliance Monitoring**

The literature review highlighted that risk management and audit are also key monitoring elements of the Control Objectives for IT (COBIT) methodology. Further the literature review highlighted that IT outsourcing represents a dynamic and high-risk environment (Earl (1996), Aubert, Dussault, Patry and Rivard (1999), Bahli and Rivard (2003)).

The external research has also highlighted that some of the organisations had specified within the contract that they retained the ***'right and access to audit'*** within the IT service provider's organisation. Although not used frequently this had proved an invaluable facility when required.

To address the issues of risk management and audit, the following sub system root definition was formulated as an aid to articulating what this sub system set out to achieve:

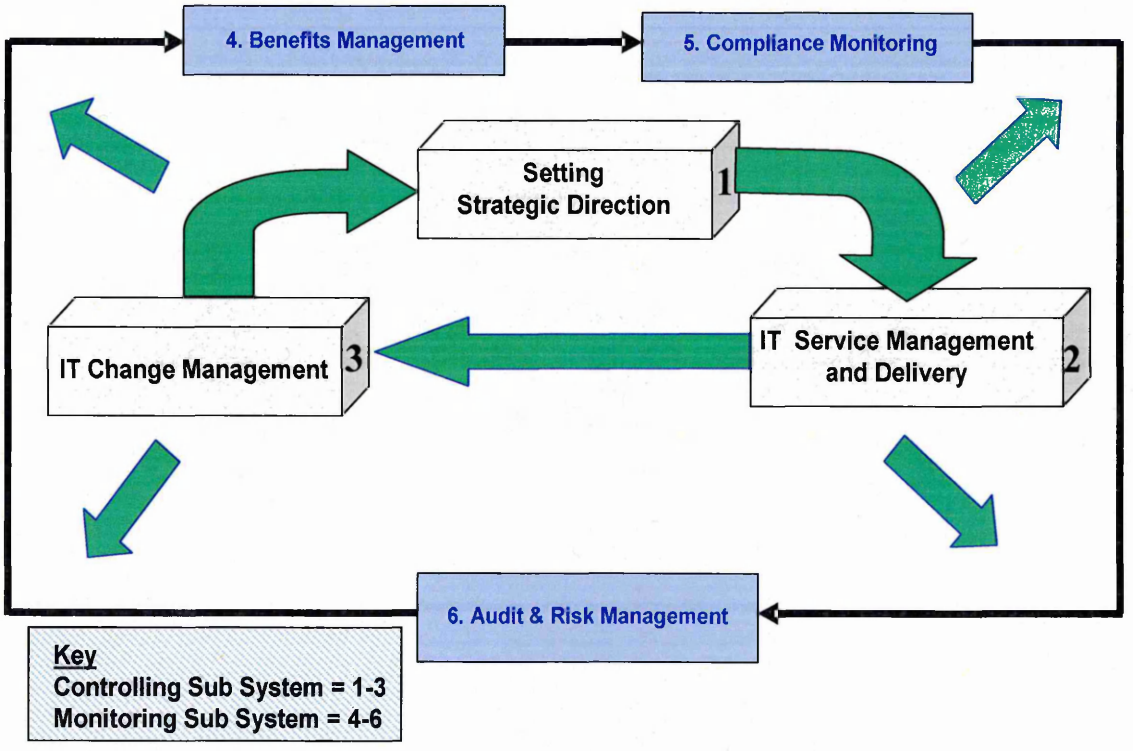
***'A sub system which will ensure that the right and access to audit is applicable with respect to the IT service provider. This right and access to audit will verify (but not be limited to) if the IT service provider is managing and controlling IT risks in an appropriate manner'***

This sub system is primarily concerned audit and risk management within the IT outsourcing environment and was named: **Sub System 6 - Audit and Risk Management.**

The three sub systems were all appropriately named ***'monitoring sub systems'*** and formed the ***'protective layer'*** around the previously defined ***'controlling sub systems'.***

The combination of the controlling and monitoring sub systems formed the ***'building blocks'*** for the detailed systems development that follow later in this chapter. The combination of the controlling and monitoring sub systems is shown in the figure that follows:

**Figure 5.3 - The IT Governance Framework - The 6 Controlling and Monitoring Sub Systems or '*Building Blocks*'**

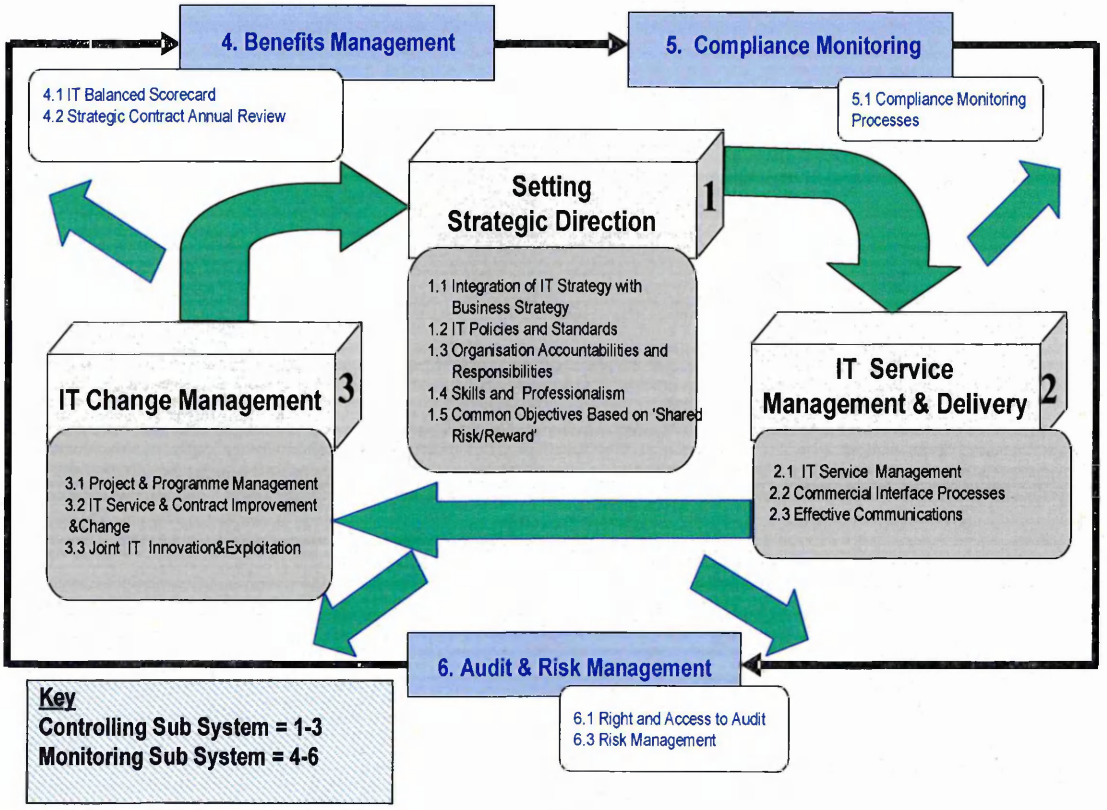



Having constructed the six sub systems that constituted the overall Governance Framework ***'building blocks'*** the next stage was to develop the next level of detail with respect to the sub systems activities and processes.

### 5.3 The finalised and detailed IT Governance Framework

Again, the detailed systems development was based on the knowledge gained by carrying out the outsourcing and IT outsourcing literature reviews and the outputs of the research and analysis of the organisations that had experience of and exposure to IT outsourcing. Based on these key inputs the detailed IT Governance Framework was constructed which is detailed in the figure that follows:

**Figure 5.4 - Development and Construction of the Detailed IT Governance Framework**



Based on the knowledge gained from the external organisation research and the literature reviews each of the ***'sub systems'*** were further designed and constructed as follows.

### 5.3.1. Setting Strategic Direction - Design of Sub System 'Integration of IT Strategy with Business Strategy'

The external research and literature review (Brancheau, Janz and Wetherby (1996), Plowman (1998) and Farrell (2003)) Chan, Huff, Barclay and Copeland (1997)) highlighted that within an IT outsourcing environment many organisations have experienced difficulty in aligning their business strategies and drivers with their IT strategies.

To assist with addressing this issue, the key activities and processes to ensure IT and Royal Mail business strategic alignment were as follows:

- Engagement between the Royal Mail business and the IT service provider to enable an understanding of the Royal Mail business strategy to be achieved. This engagement would take place via a contractually agreed Strategic Information Exchange Group which consists of representatives from Royal Mail business and IT strategy formulators and the IT service provider who have responsibility for IT strategy delivery. This group would ensure that an IT strategy is developed and deployed within the context of the overall Royal Mail business strategy and drivers

- The IT strategy was designed to include an agreed high level list of IT implications and key IT objectives based on the requirements of the Royal Mail business strategic direction and goals. The IT strategy would also define the required underpinning IT architecture and direction. The IT Strategy would also include an agreed IT demand plan which is based on the levels of anticipated IT demand (short, medium and long term). This will ensure that the IT service provider

is able to provide the necessary resource to deliver the requirements of the IT Strategy

These key activities above sought to ensure that the IT service provider understands, and is aligned with, the Royal Mail business and IT strategic direction and will seek to address the problem area of poor strategic alignment between business and IT functions and strategies. The objective of the activities outlined above was to ensure ***'fusion'*** (Brancheau, Janz and Wetherby (1996)) of business and IT strategies within the Royal Mail / IT service provider IT outsourcing environment.

### 5.3.2 Setting Strategic Direction - Design of Sub System 'IT Policies and Standards'

The external interviews highlighted that IT policies and standards were viewed to be a key mechanism to ensure that appropriate direction is set and then subsequently managed and changed.

The research also highlighted that IT policies and standards were derived from publicly available IT industry sources such as the Office of Government Commerce (OGC) or the IT Infrastructure Library (ITIL).

Drawing upon the information from the external interviews and industry sources, the key areas where policies and standards were required within the Royal Mail IT outsourcing environment were as follows:

- IT Development (including IT technical architecture and IT systems design and development methodology)

- IT systems Acceptance and Testing

- Hardware replacement policies (covering, for example, PC's and printers)

- Information Management (including data access, protection, control, backup and storage)

- Information Security (i.e. computer anti-virus, internet security, and IT system and Personal Computer access and security)

- IT software provision

- Intellectual Property Rights (IPR)

- IT risk management

- IT related health and safety issues

The IT policies and standards, although derived from information from the 'core information' from the external interviews and industry sources, were compiled within the context of the **specific** Royal Mail business and IT outsourcing environment. Also the IT policies and standards were required to support and underpin the IT strategy, detailed in the preceding chapter. All the IT policies and standards were agreed up front as part of the IT contract negotiations with the IT service provider and were designed with the objective of forming future contractual requirements between Royal Mail and the IT service provider.

### 5.3.3 Setting Strategic Direction - Design of Sub System 'Organisational Accountabilities and Responsibilities'

The external research identified the need to have clear organisational accountabilities and responsibilities to enable an effective interface between the customer and IT service provider organisations.

The interviews with external organisations had also highlighted a level of confusion and ambiguity over clear accountabilities and responsibilities between customer and IT service providers. This level of confusion had implications in that unnecessary overlap and duplication of effort between the customer and the IT service provider was apparent.

Also a specific area of concern arising from the external research was that clear decision-making rights were not evident. Again this created a level of confusion within the context of the overall customer / IT service provider relationship. Dallas (2004) highlighted the importance of having clear decision making rights and accountabilities within the context of an overall IT governance framework within an IT outsourcing environment:

***'Effective IT governance is a primary determinant of IS organisation success. Governance involves the assignment of decision making rights and accountabilities regarding behaviour in the desirable use of IT'***
Dallas (2004)

In an attempt to overcome this problem area, as part of the IT service contract negotiations, a document was developed which mapped and detailed the key accountabilities, responsibilities and decision making rights between Royal Mail and the IT service provider. This sought to ensure that, by agreeing up front clear accountabilities, responsibilities and decision making rights, a clear direction would be created for the overall relationship to subsequently operate within.

### 5.3.4 Setting Strategic Direction - Design of Sub System 'Skills and Professionalism'

The external research and IT outsourcing literature review highlighted that in order to provide direction and ultimately achieve the success of an IT outsourcing relationship adequate levels of IT skills and professionalism should be in place. Lacity and Willcocks (2001) also recognised the importance of capabilities and skills and professionalism creating competitive advantage within the context of an IT outsourcing environment. The 9 key skills and professionalism that Lacity and Willcocks identified were, ***'IS/IT Governance'***, ***'Business Systems Thinking'***, ***'Business- IT Relationship Building'***, ***'Designing Technical Architecture'***, ***'Making Technology Work'***, ***'Informed Buying of IT Service'***, ***'Contract Facilitation***, ***Contract Monitoring'*** and ***'Vendor Development'***.

To assist with determining the skills and professionalism requirements required within the Royal Mail IT outsourcing environment, the 9 skills and professionalism capabilities identified by Lacity and Willcocks (2001) were mapped against, and compared with, the skills and professionalism areas which were extracted from the overall Royal Mail IT Governance Framework and associated sub systems. The skills and professionalism mapping is contained in the table that follows:

**Table 5.1— Skills and Professionalism Capability Requirements**

| **Lacity and Willcocks Skills and Professionalism Capability Requirements** | **Identified Skills and Professionalism Links to the Royal Mail IT Governance Framework Sub Systems** |
|---|---|
| ***IS/IT Governance*** | **IS/IT Governance** is required to develop, implement and maintain the **overall** Royal Mail IT Governance Framework |

| | |
|---|---|
| ***Business Systems Thinking*** | **Sub System 1 - Setting Strategic Direction**<br><br>➢ Business Systems Thinking will be administered by the integration of the Royal Mail business strategy with the IT strategy, this will ensure that the IT strategy is fully aligned with the Royal Mail business strategy |
| ***Business - IT Relationship Building*** | **Sub System 1 - Setting Strategic Direction**<br><br>➢ Agreed service and performance management and commercial engagement and dialogue between Royal Mail Business / IT functions and the IT service provider will assist with the overall Royal Mail Business - IT relationship building<br><br>➢ Common objectives based on shared risk / reward processes will also assist with the Royal Mail Business - IT relationship building |
| ***Designing Technical Architecture*** | **Sub System 1 - Setting Strategic Direction**<br><br>➢ Designing technical architecture will form part of the overall IT Policies and Standards definition |
| ***Making Technology Work*** | **Sub System 2 - Service Management and Delivery**<br><br>➢ IT service management, commercial interface and effective communications will all assist with making technology work |
| ***Informed Buying of IT Service*** | **Sub System 2 - IT Service Management and Delivery**<br><br>➢ IT service management, commercial interface and effective communications will all assist with informed buying of IT service |
| ***Contract Facilitation*** | **Sub System 2 - Service Management and Delivery**<br><br>➢ IT service management, commercial interface and effective communications will all assist with the contract facilitation |

| | |
|---|---|
| ***Contract monitoring*** | **Sub System 4 - Benefits Management**<br><br>➢ The IT Governance Framework Contract Monitoring (can also be termed Benefits Management ) measures include the IT Balanced Scorecard and Strategic Contract Annual Review |
| ***Vendor Development*** | **Sub System 2 - IT Service Management and Delivery**<br><br>➢ IT service management, commercial interface and effective communications will all assist with the IT Service provider (or vendor) development |

The skills and professionalism capabilities identified in the previous table would form the baseline for the capabilities which were required within the Royal Mail IT outsourcing environment.

The mapping of the Lacity and Willcocks (2001) skills and professionalism capabilities against the Royal Mail IT Governance framework requirements identified a number of gaps and additional capabilities which were required to have the necessary levels of skills and capabilities required to manage and operate the Royal Mail IT governance framework.

The additional skills and professionalism capabilities required to manage and operate the Royal Mail IT governance framework are detailed in the table that follows:

**Table 5.2 - Additional Skills and Professionalism Requirements**

| Other Suggested Skills and Professionalism Requirements | Additional Skills and Professionalism Requirements Required for the Royal Mail IT Governance Framework |
|---|---|
| **1. IT Change Management** | **Sub System 3 - IT Change Management**<br>➢ The IT Governance Framework sub system processes associated with project and programme management, IT service and contract improvement and change and joint IT innovation and exploitation will assist with change management within the Royal Mail IT outsourcing environment |
| **2. Compliance Monitoring** | **Sub System 5 - Compliance Monitoring**<br>➢ The IT Governance Framework sub system process associated with compliance monitoring will assist with ensuring that IT service provider compliance against all agreed contractual requirements is achieved |
| **3. Audit and Risk Management** | **Sub System 6 - Audit and Risk Management**<br>➢ The IT Governance Framework sub system processes associated with audit and risk management will ensure that effective processes and activities are in place which deal with audit and risk management requirements within an IT outsourcing environment |

The skills and professionalism capabilities identified within the table would be utilised as the baseline requirements to ensure that the Royal Mail IT Governance Framework could be operated and managed within an IT outsourced environment.

The required capabilities marked a significant shift from the current levels of skills and professionalism within Royal Mail and there was a recognition that significant training, development and recruitment activities would be required to ensure that the necessary skills and professionalism capability requirements were developed and implemented within the Royal Mail IT outsourcing environment.

### 5.3.5 Setting Strategic Direction - Design of Sub System 'Common Objectives Based on 'Shared Risk / Reward'

A key issue identified through research within the external organisations was that common objectives based on a shared risk / reward philosophy had proved successful in providing and setting direction that would ensure that shared customer and IT service provider benefits are realised. An example, provided as part of the external research, was the development of a new IT product, which could potentially achieve around 20% savings on current IT operational costs, associated with the existing IT product. If the anticipated savings could be achieved then the associated ***'rewards'*** would be shared between the customer and IT service provider. Alternatively, if the new product failed to deliver any operational savings then the customer and IT service provider would share the ***'risk'*** or cost element associated with the failed initiative.

The shared risk / reward philosophy would be implemented within the Royal Mail IT outsourcing environment with an objective of ensuring that shared Royal Mail and IT service provider benefits are realised within the IT outsourcing environment. In support of this argument Research by Gartner (2002) and Meta (2002) had highlighted that ***'shared benefits'*** are a key success factor within the context of customer / IT service provider relationships.

### 5.3.6. IT Service Management and Delivery - Design of Sub System 'IT Service Management'

Previous chapters and research findings have articulated that IT service management is a key mechanism where the ***'social exchange'*** occurs between the customer and the IT service provider. The IT service management interface is a mechanism where ***'trust'***, a basic concept of social exchange theory, may be developed between the customer and the IT service provider. The work of Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999) had highlighted that ***'trust'*** is one of the most desired qualities in any close relationship.

In order to define the IT service management requirements, the Information Technology Infrastructure Library (ITIL) standards for IT Service Management were used within the Royal Mail IT outsourcing environment. ITIL is currently the accredited IT industry standard for IT service management and is the only publicly available guidance on IT service management. A summary of the ITIL requirements for IT service management is contained within the following table:

**Table 5.3 - IT Infrastructure Service Management Tasks**

| IT Infrastructure (ITIL) Service Management Task | Summary of ITIL Task / Key Responsibilities |
|---|---|
| **IT Helpdesk Interface** | ➢ Provision of an IT Helpdesk interface<br>➢ Assist the IT Helpdesk with the Management and control of IT incidents<br>➢ Provide support to business operations<br>➢ Provision of IT management and reporting information |
| **IT Problem Management** | ➢ Provision of second level support (after the IT Helpdesk) for diagnosing and resolving difficult or major IT incidents<br>➢ Identify , diagnose and record the root causes of IT incidents with the objective of preventing re-occurrence |

| | |
|---|---|
| | ➢ Identify potential IT problems and issues before they can cause any disruption to IT services |
| **IT Change Management** | ➢ Processing and scheduling operational changes to IT services<br>➢ Keep a record of IT changes by ensuring processes are in place to log, track and review IT changes |
| **IT Software Control and Distribution** | ➢ Authorising, defining, controlling and maintaining IT software releases |
| **IT Service Level Management** | ➢ IT Service Level Management is a discipline which requires the construction, agreement and maintenance of Service Level Agreements (SLA's) between customers and IT service providers. Examples of SLA content include:<br>❖ IT service availability hours<br>❖ Definition of user support levels (i.e. responsiveness times to fix defined IT problems)<br>❖ IT contingency planning<br>❖ IT security measures in place<br>❖ Agreed Key Performance Indicators (KPI's) for the IT services (i.e. IT incident fix times and IT Helpdesk response time) |
| **IT Cost Management** | ➢ IT cost management consists of:<br>❖ Knowing what the costs of providing IT services are (These may be defined within the IT outsourcing contract)<br>❖ Ensuring that the appropriate charging mechanisms are in place to recover IT costs from users |
| **IT Capacity Management** | ➢ Managing IT resource and demand requirements<br>➢ Producing, managing and monitoring IT capacity plans and performance |
| **IT Contingency Planning** | ➢ Ensuring that an appropriate IT contingency plan is in place to address IT system failure(s). This should address any specific business requirements to be able |

| | |
|---|---|
| | to maintain critical IT services |
| **IT Configuration Management** | ➢ IT Configuration management is a key IT discipline which enables IT managers and service providers with a mechanisms to:<br>❖ Ensure control over IT assets<br>❖ Provide status accounting and verification for IT assets |
| **IT Availability Management** | ➢ IT availability management ensures reliability, maintainability and serviceability with respect to IT systems delivery |

As stated previously the ITIL IT Service Management standards would be applied within the Royal Mail IT outsourcing environment. However, the overriding principle (irrespective of ITIL) was to ensure that a robust industry standard IT service management methodology was adopted as the standard within the Royal Mail IT outsourcing environment. IT Service Management is an identified skills and professional capability for the Royal Mail IT outsourcing environment and would require significant training, development and recruitment to ensure that this capability is successfully developed and implemented.

Previous reference has been made to the importance of managing IT performance within an IT outsourcing environment. Some of the IT performance measures which have been identified from the ITIL IT Service management principles, which would be adopted within the Royal Mail IT outsourcing environment, are as follows:

- Managing the agreed IT performance defined in the agreed Service Level Agreements (SLA'S) and Key Performance Indicator (KPI's)

- Performance and user acceptance tests on new IT systems

- Reviewing the IT service, in terms of performance and delivery against agreed metrics and targets

- Carrying out customer satisfaction reviews and constructing / implementing IT improvement plans based on the review feedback and customer feedback with respect to IT performance

- Monitoring performance of the agreed IT balanced scorecard (detailed later in this chapter)

### 5.3.7. IT Service Management and Delivery - Design of Sub System 'Commercial Interface Processes'

The earlier process of defining the Royal Mail IT outsourcing problem situation had highlighted the concern of moving from an internal, largely transaction driven, internal IT service provision to a highly commercial and contractual IT outsourcing environment. These concerns are also articulated by Beulen and Ribbers (2003) who's work on the ***'IT Outsourcing: Incomplete Contract Theory'*** highlighted that the commercial interfaces within an IT outsourcing environment are a problem area for both the customer and their respective IT service providers.

A key aspect of the customer / IT service provider interface is that purchasing processes are required to ensure that IT products and services can be purchased in an effective and efficient manner. The work of Heckmann (1999) however highlighted that many organisations within an IT outsourced environment ***'Have not implemented any purchasing processes at all, or have not implemented then adequately'*** (in Beulen and Ribbers, (2003)). The research by both Beulen and Ribbers (2003) and Heckmann (1999) highlighted that organisations experienced difficulty in moving from internal to external or outsourced IT service provision.

To overcome this problem area the following commercial processes were developed with the objective of implementing within the Royal Mail IT outsourcing environment:

- A comprehensive IT service catalogue was prepared which included a list of all IT services available (i.e. PC's, Printers, software etc) along with the process to order these from the IT service provider
- A process to deal with changes and enhancements to existing IT systems
- Details on how new IT projects and programmes are initiated and subsequently progressed
- Details on how to engage specialist IT resource from the IT service provider (i.e. IT analysis or consultancy)

### 5.3.8. IT Service Management and Delivery - Design of Sub System 'Effective Communications'

The external research highlighted that the customer and IT service providers had a tendency to communicate in ***'individual silos'***.

To address this issue, and provide an integrated approach, a Royal Mail / IT service provider joint communications plan was constructed that enabled the following examples of joint communication areas to be addressed:

- The agreed IT strategic drivers and objectives (i.e. The outputs of Sub System 1 – Setting Strategic direction)

- Progress against agreed IT service operational and performance targets

- Improvement opportunities in progress - these included existing IT service improvements as well as new IT innovation and exploitation initiatives which are in progress

- Details of any major IT system changes - This could be changes to existing IT systems or planned new IT systems

- Any major achievements and commendations would form part of the joint communications plan

### 5.3.9. IT Change Management - Design of Sub System 'Project and Programme Management'

The external research had highlighted that a key IT change mechanism was to have an effective project and programme delivery methodology in place. The project and programme methodology which would be adopted by Royal Mail was aptly named Projects within a Controlled Environment (PRINCE). PRINCE (originally named PROMPT 2) was introduced as a Government Standard, supported by the Central Computer and Telecommunications Agency (CCTA) in 1983. It is utlised by many Government Departments and agencies and provides an organised and robust project and programme control framework within which an IT system can be specified, designed, developed and installed. The key elements of PRINCE which would operate within the Royal Mail IT outsourced environment are as follows:

- Constructing and agreeing project initiation documents which include:

  - The business case and benefits analysis to justify the project

- ❖ Structure of the project team
- ❖ Key project timescales and milestones
- ❖ Details of the project and programme sponsor(s)

- ➢ Production and agreement of detailed project plans
- ➢ Production and agreement of IT technical implementation plans
- ➢ Project risk / issues analysis and management
- ➢ Mechanisms to deal with change in the project environment - this could include, for example, changes in project scope and timescales due to external influences
- ➢ Appropriate project cost tracking mechanisms are required to ensure that project costs are adequately monitored and controlled
- ➢ Project communications plan - to include project communications to key project stakeholders and end user audience

The PRINCE project and programme standards would be applied within the Royal Mail IT outsourcing environment. However, the overriding principle (irrespective of PRINCE) was to ensure that a robust industry standard IT project and programme management methodology was adopted as the standard within the Royal Mail IT outsourcing environment.

### 5.3.10 IT Change Management - Design of Sub System 'IT Service and Contract Improvement and Change'

The external research had highlighted that the customer / IT service provider relationships were to some extent confrontational and overly bureaucratic. This environment was not conducive to achieving improvements to IT systems and contractual arrangements and processes.

To address this issue processes were developed to encourage improvements to existing IT systems and create an environment where IT systems improvement initiatives were encouraged and indeed sponsored by Royal Mail. Also, processes were put in place to deal with changes and improvements to the IT service contract and ensure that the contract is continually refreshed and updated to reflect a rapidly changing and dynamic IT outsourcing environment.

Further, the external research highlighted that although some organisations had embarked on an IT outsourcing arrangement with some form of contract exit management strategy, they had failed to keep this updated. Therefore after a period of time some organisations had no strategy in place when the IT outsourcing failed to deliver anticipated business benefits and objectives.

To address this issue a contract management exit strategy was developed for Royal Mail. This strategy would be periodically updated to ensure that should inadequate benefits realisations prove to be an issue then mechanisms and options are in place to seek resolution to this potential problem area.

**Important Note – The general principles of this contract exit management strategy are in the strictest of commercial confidence and cannot be re-produced**

### 5.3.11. IT Change Management - Design of Sub System 'Joint IT Innovation and Exploitation'

The external programme research has highlighted the specific finding and issue that an:

***'IT service provider's commitment to innovation and technology exploitation had been poor'***

This view was supported by the research by Gartner (2002) and Meta (2002) who also highlighted that the commitment to new technology innovation and exploitation between a customer organisation and IT outsourced company has generally been poor bearing in mind that innovation and technology exploitation is a key change mechanism.

To address this issue, joint commitment between Royal Mail and its IT Service Provider would be gained during the contract negotiations so that there would be significant focus on IT innovation and exploitation initiatives. These initiatives would be linked to achieving overall business benefit for both Royal Mail and the IT service provider and would be carried out within the spirit of the ***'shared risk / reward'*** philosophy which has been detailed earlier.

### 5.3.12. Benefits Management - Design of Sub System 'IT Balanced Scorecard'

Before detailing the IT balanced scorecard objectives, it is necessary to summarise the discussions that took place with the Research Programme Team initiated as a result of the findings arising from the external research interviews. The findings were that organisations that had outsourced IT capability had not taken sufficient measurement of in house IT performance before IT outsourcing and, therefore, had no accurate ***'baseline'*** to compare anticipated benefits with the realised benefits from the subsequent external IT outsourcing arrangement.

To address this issue, work was carried out to establish internal IT performance metrics which would form the baseline for the external IT outsourcing arrangements. These metrics fell broadly in the following areas which were derived from the external research findings and from the Information Technology Infrastructure Library (ITIL) methodology which has been previously detailed. The metrics detailed in the table below were also linked to the Kaplan and Norton (1993) IT balanced scorecard categories:

**Table 5.4 - Royal Mail Performance Metrics**

| **Performance Metric** | **Link to Kaplan and Norton (1993) Balanced Scorecard category** |
|---|---|
| Financial cost of internal IT service provision | Financial |
| IT performance and operational metrics, examples of these include:<br>❖ Service incident fix times relating to hardware such as PC's and printers<br>❖ Time to 'roll out' new IT software<br>❖ IT System availability<br>❖ IT helpdesk performance<br>❖ IT service change request management processes and procedures | Processes |
| Benefits realisation of new IT projects and programmes and major IT service change, enhancements and improvement initiatives | Learning and Growth |
| Customer satisfaction with the in house IT service | Customer |

Future balanced scorecard targets, agreed with the external IT service provider, were therefore set against achieving specified levels of improvement on the baseline

metrics detailed above. In addition to these baseline metrics, an additional performance metric would be introduced which set targets for joint IT innovation and exploitation. These targets were based on ensuring that a specified number of identified IT innovation and exploitation opportunities were implemented with an objective of achieving an agreed level of business benefit. This addressed an issue arising from the external research, as articulated earlier in this chapter, that historically an IT Service provider's commitment to IT innovation and exploitation had been poor.

### 5.3.13 Benefits Management - Design of Sub System 'Strategic Contract Annual Review'

In order to ensure monitoring of benefits management within the Royal Mail IT outsourcing environment, a strategic IT contract annual review would be carried out. This review would provide an analysis of the overall health of the IT outsourcing relationship and contract. Specific areas for the review would include:

- Review of the effectiveness and efficiency of the overall IT Governance Framework
- Review of the effectiveness of the Royal Mail / IT service provider relationship meetings and interfaces
- Performance against the agreed IT balanced scorecard objectives (As detailed previously this covers areas such as finance, IT service performance and customer satisfaction)
- Review of the effectiveness of the implementation of new IT services and major enhancements to existing IT services

- Review of any areas of IT non-compliance and of major IT audit activities and IT risks

The strategic contract annual review would also provide project and programme benefits analysis activities which would ensure that Royal Mails portfolio of projects and programmes are reviewed on completion. These reviews would verify if the anticipated IT project and programme business benefits are being realised and also would check if the project and programme methodology (namely PRINCE) is being consistently deployed across Royal Mail's project and programme portfolio.

The key objectives of the strategic contract annual review would be to identify any potential benefits and relationship improvement opportunities and also to formally agree any IT service contract changes, which may be required as a result of the review activities identified above.

### 5.3.14 Compliance Monitoring - Design of Sub System 'Compliance Monitoring Processes'

The external research had highlighted that some of the organisations to some extent disregarded compliance as being part of their responsibilities. They put the onus on the IT service provider to comply with customer requirements which were set out in for example the contract schedules and service / product specifications. As a result any failure to comply (with for example IT policies and standards) by the IT service provider were found ***'after the event'***. Compliance monitoring processes were designed which would ensure that the IT service provider complied with the overall requirements of the IT Governance Framework and also with the following key areas:

- IT strategy

- Any agreed IT technical architectures

- IT Policies and standards
- IT Project and programme methodology (namely PRINCE 2)
- Agreed audit and risk management processes

### 5.3.15 Audit and Risk Management - Design of Sub System 'Right and Access to Audit'

A learning point from the external research was the importance for the customer to retain the ***'right and access to audit'*** within the IT service provider organisation. This audit right includes financial audits as well as specific audits of IT systems and processes.

The right and access to audit would be incorporated within the Royal Mail / IT service provider relationship to ensure that investigations and audits can be carried out to address any concerns and issues that arise whilst operating within the IT outsourcing environment. An overriding objective is that IT audit improvement plans would be produced and implemented.

### 5.3.16 Audit and Risk Management - Design of Sub System 'Risk Management'

The literature review has highlighted that IT outsourcing represents a dynamic and high-risk environment (Earl (1996), Aubert, Dussault, Patry and Rivard (1999), Bahli and Rivard (2003)). Also the external research had highlighted that some of the external research organisations had assumed that the management of ***'IT risks'*** would be the responsibility of the IT service provider. The research highlighted evidence that this has created an anomaly or misalignment between how the customer and IT service provider assess and seek to mitigate IT risks.

To address this issue, the design facilitated that Royal Mail defined a framework for how the IT service provider assesses and mitigates IT risks. To ensure alignment between Royal Mail and the IT service provider, this framework was based on the principles and standards with respect to how Royal Mail manages its own risks in other technology areas such as engineering and automation.

### 5.4 SSM Stage 3: Real World - Comparison and Debating

Having constructed the IT Governance Framework within the ***'systems world'*** this chapter deals with the comparison and debating of this framework with the Research Programme Team and how this framework would operate in the Royal Mail ***'real world'*** environment. Checkland (2001) described 4 ways to carry out the comparison and debating stage of SSM. These are summarised below:

1. The systems models are used to open a debate about the ***'required change'***

2. The comparison is done by re-constructing a sequence of events in the past

3. Debating what features of the conceptual models are especially different from present reality and why

4. A second model is constructed on the basis of ***'what exists'*** in the real world and this is used as a basis to identify change in the systems derived model

My objective was to ensure that the debate was ***'conscious, coherent and defensible'*** (Checkland (2001). Also, as the debate was primarily about what ***'change'*** was

required to operate within the Royal Mail IT outsourced environment (as opposed to the current internal IT provision). I took the decision to engage the Research Programme Team in a debate about the ***'required change'*** to move from internal IT service provision to an IT outsourced environment, This approach being consistent with Checklands **Option 1** because the IT outsourced environment was a totally new concept for Royal Mail this would be described by Checkland (2001) as a ***'greenfield situation'.***

The summary of the comparison and debate, which took place with, the Research Programme Team, along with the key outputs and agreements reached is as follows:

- There was a broad agreement that the existing IT systems, processes and activities that currently exist within the internal Royal Mail ***'real world'*** internal IT environment are not sufficient, or indeed appropriate, to manage a highly commercial and contractual IT outsourcing relationship. Therefore, little or no debate took place on the appropriateness or ***'fit for purpose'*** of existing processes and systems to operate in an outsourced environment

- Agreement was reached that the IT Governance Framework should be implemented within the Royal Mail IT Outsourcing environment. As Head of Governance for Royal Mail, it was my responsibility to enter into negotiations with the proposed IT service provider to negotiate an appropriate IT contract schedule which sets out the requirements to operate within the principles of the IT Governance Framework. Because the Research Programme Team had been involved in the earlier design of the IT Governance Framework there was no opposition to the framework being utilised

Note that the IT Governance Framework and the associated principles of operation were vetted by external contract lawyers and consultants to ensure that the framework was appropriate from both contractual and legal perspectives

- Some concerns were raised with respect to how the theoretically derived ***'systems world'*** IT Governance Framework would operate within a practical ***'real world'*** highly contractual and commercial IT outsourcing environment. To overcome these concerns, debate took place on how the systems constructs had been derived from the practical IT outsourcing problem situation which was previously defined as a result of the external organisation research. The summary of external research findings and the IT outsourcing problem situation rich picture again proved extremely useful facilitative devices in defending the practical and real world nature of the systems constructs. It was agreed to go ahead with the implementation of the IT Governance Framework and that any doubts raised were based on being unfamiliar with the SSM process, in particular the systems world processes, rather than the real world concepts of SSM

- The following 'best practice' contract principles which were identified previously as a result of the earlier research were debated and it was agreed that these would be implemented as part of the IT outsourcing arrangement. These principles are summarised in the table that follows:

**Table 5.5 - Summary of Contract Principles**

| Summary of Contract Principles |
|---|
| *1.0 Agree the IT Governance Framework as part of the outsourcing negotiations* |
| *2.0 Embed a 'Shared Risk / Reward' philosophy* |
| *3.0 Retain the Right and Access to Audit* |
| *4.0 Measure IT performance metrics both before and after outsourcing* |
| *5.0 Gain commitment to innovation and technology exploitation* |
| *6.0 Define up front accountabilities and responsibilities* |
| *7.0 Contract Schedules to be constructed 'In House'* |
| *8.0 Have a contract exit management strategy* |

Note that the contract principles were vetted by external contract lawyers and consultants to ensure that the principles were appropriate from both contractual and legal perspectives

- It was agreed that to successfully implement the IT Governance Framework then appropriate people / physical relationship interfaces would be required between Royal Mail and the IT Service Provider. The necessary relationship interfaces required to bring the IT Governance Framework to ***'life'*** within the highly contractual and commercial IT outsourcing environment are detailed later. These interfaces would assist with creating the Royal Mail / IT service provider relationship ***'fusion'*** which Brancheau, Janz and Wetherby (1996) have referred to within the context of overall customer / IT service provider relationships

## 5.5 SSM Stage 4: Real World – 'Action to Improve'

The action to address the ***'real world'*** IT outsourcing environment involved the implementation of the IT Governance Framework which was developed during the previous chapters and stages of SSM previous research methods chapters have detailed how ***'action research*** was used as the research method. Therefore any ***'actions to improve'*** the IT Outsourcing environment were carried out within the context of the action research methodology.

These actions will be detailed later in this Chapter and involve, amongst other things, utilising the SSM theoretically derived ***'systems'*** that constitute the overall IT Governance Framework within the context of the Royal Mail practical ***'real world'*** IT outsourcing environment. As stated previously, SSM has been developed and tested throughout a large number of action research projects and programmes. Action research projects have been described by Wilson (1984) as:

***'Simultaneously bringing about change in the project situation (the action) while learning from the process of deriving the change (the research)'***

SSM has been used as the research theoretical framework to assist with ***'the research'*** requirement of the ***'project situation'*** within the context of the overall research programme. The next Chapter details how ***'the action',*** or the application, aspect of this research programme is fulfilled.

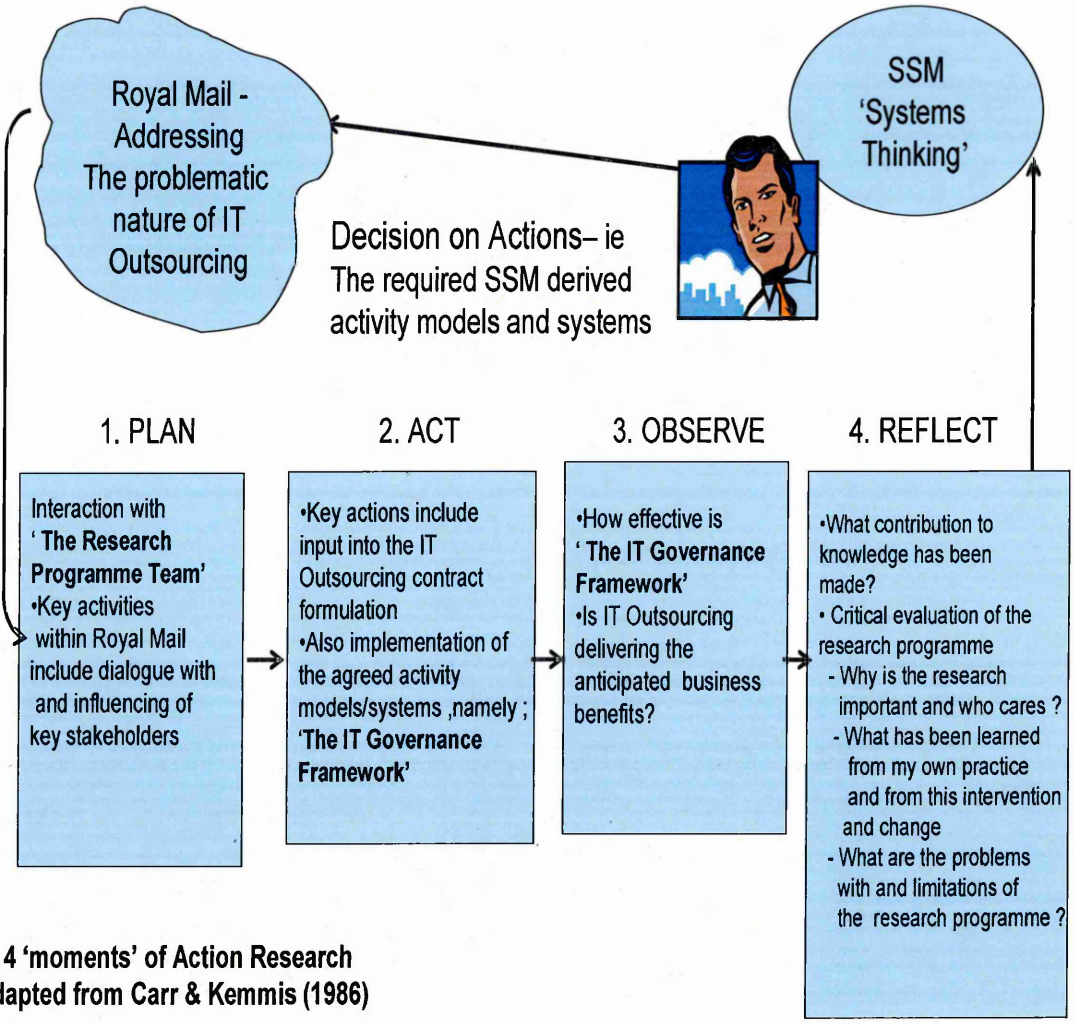
# Chapter 6

# Application of an Information Technology Governance Framework

### 6.1 Action Research in Practice

The figure that follows details the ***'four moments'*** of action research which forms the basis of describing the process of how action research is utilised within the context of this research programme:

**Figure 6.1 - The 4 Moments of Action Research**




**The 4 'moments' of Action Research – Adapted from Carr & Kemmis (1986)**

The figure details how the outputs of the previously derived SSM activity models and systems are used to form an input to address the practical concerns of Royal Mail who were addressing the problematic nature of IT outsourcing. The ***'four moments'*** (or stages) of action research, namely ***'planning'***, ***'acting'***, ***'observation'*** and ***'reflection'*** are detailed within the paragraphs that follow.

### 6.1.1 Action Research - Planning

The Research Programme Team has been involved in the SSM stages which have enabled the IT Governance Framework and associated principles to be developed. The action research ***'planning'*** stage involved continuing to work with the Research Programme Team to ensure that plans were developed to ensure that the IT Governance Framework would be applied within the Royal Mail IT Outsourcing environment.

The key planning activities and tasks are as follows:

- There was an agreed need to widen the awareness, understanding and potential benefits of implementing the IT Governance Framework within the Royal Mail IT outsourcing environment. This awareness involved future dialogue with key stakeholders across Royal Mail

- Agreement had previously been reached with the Research Programme Team that the IT Governance Framework should be implemented within the Royal Mail IT Outsourcing environment. As Head of Governance for Royal Mail, it was therefore, my responsibility to enter into negotiations with the proposed IT service provider to negotiate an appropriate IT contract schedule which sets out the requirements to operate within the principles of the IT Governance Framework. This task required significant planning to ensure that these negotiations

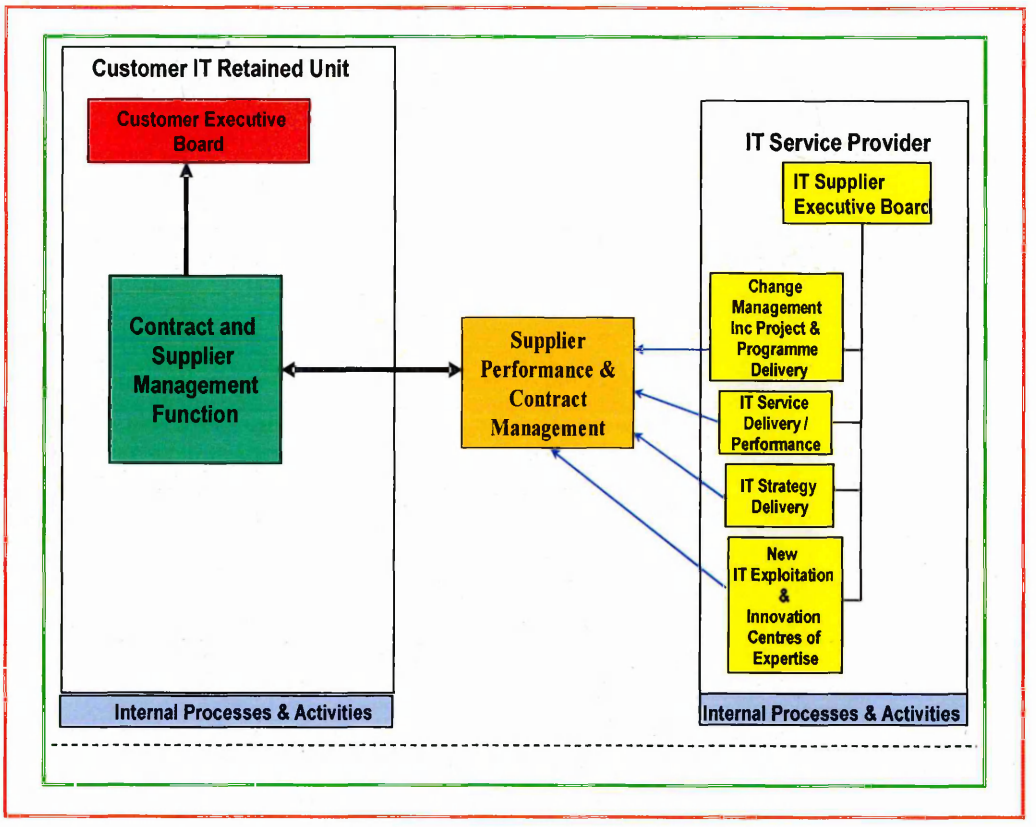
were carried out within the same timescales as the wider Royal Mail IT contract negotiations. Part of this task was also to ensure that the IT Governance Framework and principles of operation were vetted and agreed by the Royal Mail engaged external contract lawyers and consultants. This ensured that the IT Governance Framework was appropriate from both contractual and legal perspectives

- The previously mentioned concerns raised by the Research Programme Team with respect to how to apply or ***'bring to life'*** the theoretically derived IT Governance Framework within a practical highly commercial and contractual environment, this is detailed in the following paragraphs

### 6.1.2 Action Research - The Application '*Bringing to Life*' the IT Governance Framework

Concerns had been raised by the Research Programme Team with respect to how the theoretically derived ***'systems world'*** IT Governance Framework would operate within a practical ***'real world'*** highly contractual and commercial IT outsourcing environment. It was agreed that, in order to successfully apply the IT Governance Framework, people / physical relationship interfaces would be required between Royal Mail and the IT Service Provider. These relationship interfaces were required to bring the IT Governance Framework ***'to life'*** within the highly contractual and commercial Royal Mail IT outsourcing environment. As a starting point to defining these relationships it was useful to analyse my external research findings, in particular, how the external research organisations had interfaced with their respective IT service providers. A typical customer / IT service provider relationship is detailed in the figure that follows:

**Figure 6.2 - Typical Customer / IT service Provider Relationship**




The figure shows that both the customer organisations and service providers have developed and operate their own internal processes and activities. The external research had highlighted that there has been insufficient focus on integrating processes and activities and therefore, to a large extent, the customer / IT service provider organisations are operating independently and in parallel of each other. The relationships were found to be classic customer / supplier based with clear contractual and operational boundaries drawn. The boundaries have evolved around the formation of the Supplier Performance and Contract Management Groups (Note - other similar group terminologies have been used across the different organisations that were researched).

The external research had also shown that these Supplier Performance and Contract Management Groups may have acted as a relationship 'bottleneck' or, as one of the interviewees stated; they have served as a ***'panacea for all issues'.*** The customer

organisations typically have consisted of small and highly contractually focussed contract and service management functions. In comparison, the IT service provider organisations had a more complex structure, which typically consisted of the following key areas:

- **Change Management** - This deals with matters relating to IT service and operational change management. It also deals with managing change through a portfolio of projects and programme

- **Service Delivery / Performance** - This group has responsibility for managing the IT service delivery and performance and is a key ***'day to day'*** operational interface with the customer IT retained unit

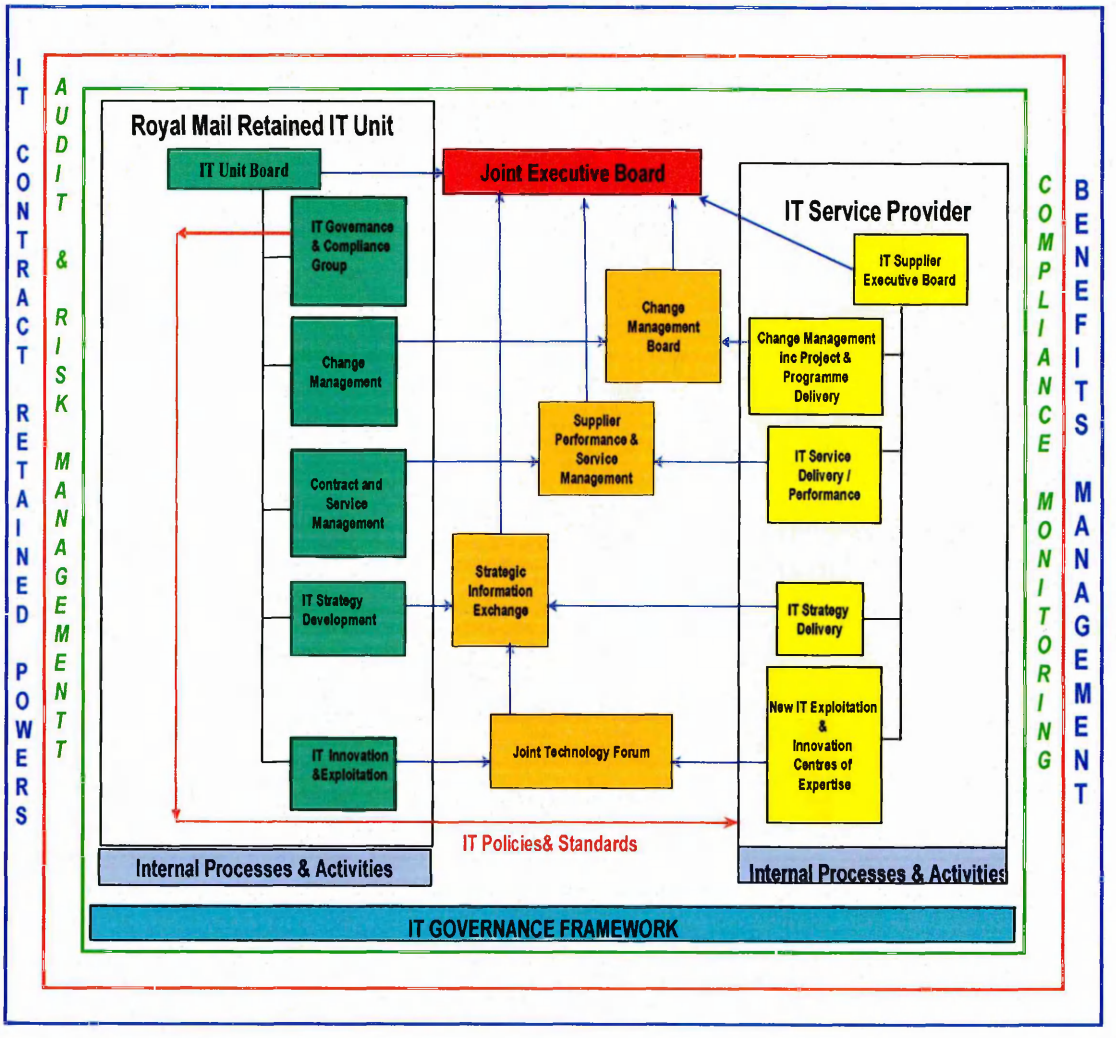
- **IT Strategy Delivery** - This ensures that the strategic elements of IT service delivery are implemented. This assumes that an IT strategy is sufficiently developed and defined by the customers IT retained unit. Based on evidence from the external research, this has not always been the case

- **New Technology and Innovation Centres of Expertise** - Each of the IT service provider organisations has internal organisational capability to exploit opportunities with respect to new IT technology and innovation. However, the figure shows that the IT innovation and exploitation groups within the IT service providers is detached from the overall relationship with the customer organisations. This may be linked to the external research finding that IT service providers overall commitment to IT innovation and exploitation has generally been poor

A general observation arising from the external research was that the customer and IT service provider organisations are, via the Supplier Performance and Contract Management Groups, tied together with one large ***'knot'***.

The revised relationship model proposal that follows was constructed in an attempt to ***'knit'*** together, or create a relationship ***'fusion'*** (Brancheau, Janz and Wetherby (1996), both strategically and operationally, between Royal Mail and their IT service provider organisation. Also, the literature review had highlighted that ***'social exchange'*** based on ***'trust'*** is one of the most desired qualities in any close relationship (Anderson and Narus 1990, Ganesan 1994, Henderson 1990, Sabherwal 1999 and Kim and Lee 1999). The revised relationship model that follows was designed in an attempt to create relationship interfaces and ***'social exchange'*** between Royal Mail and their IT service provider which are built on ***'trust'*** and mutual collaboration.

**Figure 6.3 - Proposed Royal Mail / IT service provider relationship model**



The relationship model detailed is an approach which sought, via the various relationship meetings and forums, to provide the practical ***'real world'*** physical relationship interfaces between Royal Mail and the IT service provider. These interfaces were required to ensure that the activities, systems and processes previously defined within the theoretically derived IT Governance Framework can be effectively and efficiently discharged within the practical Royal Mail IT outsourced environment.

A key objective of the proposed customer / IT service provider relationship model was to create an IT outsourcing environment where effective integration and ***'fusion'*** (Brancheau, Janz and Wetherby (1996)) of activities, systems and processes are achieved between Royal Mail and the IT Service provider. Therefore, as shown in the proposed relationship model, to enable this integration or ***'fusion'*** to be achieved, the IT Governance Framework activities, systems and processes span across both the customer and IT service provider organisations.

The outer borders of the proposed customer / IT service provider relationship model detail the three IT Governance Framework monitoring sub systems (namely Sub System 4 – Benefits Management , Sub System 5 - Compliance Monitoring and Sub System 6 - Audit and Risk Management)

These three monitoring sub-systems form the ***'protective layer'*** around the controlling sub systems, which form the inner part of the IT Governance Framework. In this context they form the ***'protective layer'*** to assist with the Royal Mail / IT Service provider relationship integration and interfaces.

A finding of the external research was that the specification of IT contract retained powers was a useful mechanism for the external customer organisations. Some of the key retained powers identified, which were utilised within the Royal Mail IT outsourcing environment are as follows:

- Input into the selection of the IT service providers sub contractors and suppliers. This ensures that sub contractors and suppliers were reputable and were not on a ***'blacklist'*** based on previous working experience and knowledge

- From a more technical aspect some of the organisations had specified reserved rights in the areas of the selection of appropriate IT technical equipment, architectures, software provision etc

- A key reserved power would be to retain the ***'right and access to audit'***. This includes right and access to financial audits and well as technical audits of IT systems to address and resolve anomalies or concerns. The external research had highlighted this to be an important and valuable retained power

To address the issue of retained powers the proposed customer / IT service provider relationship model has an additional outer ***'protective layer'*** included entitled IT Contract Retained Powers.

Because of the issues and problems, detailed earlier, with having a single central contract and supplier management function, it was the intention that the Royal Mail retained IT Unit would have a more flexible and dynamic structure that is aligned with the systems, activities and processes that constitute the overall IT Governance Framework. To achieve this structure, the proposed Royal Mail retained IT unit is detailed within the proposed relationship model and consists of the following:

- **IT Governance and Compliance** - This has overall responsibility to ensure that the IT Governance Framework is constructed, maintained and improved. This group has responsibility for ensuring that IT policies and standards are set within the Royal Mail retained IT unit and deployed within the IT service provider organisation.

The IT governance and compliance team are accountable for the monitoring sub systems within the IT Governance Framework namely, Sub system 4 - Benefits Management , Sub system 5 - Compliance Monitoring and Sub System 6 – Audit and Risk Management

- **Change Management** - This provides the change management interface to the IT service provider and deals with matters relating to IT service and operational change management. It also deals with managing change through a portfolio of projects and programmes. Also the change management group has responsibility for any major changes and improvements to the IT services and contract

  The change management group are accountable for the IT Governance Framework controlling Sub System 3 - Change Management

- **Contract and Service Management** - This group has responsibility for managing the IT service delivery and performance and provides a key day to day operational interface with the IT service provider

  The contract and service management group are accountable for the IT Governance Framework controlling Sub System 2 - IT Service Management and Delivery

- **IT Strategy Development** - This group ensures that an IT strategy and demand plans are developed for future deployment by the IT service provider

  The IT strategy development and demand management group are accountable for a key activity within the controlling Sub System 1-

Setting Strategic Direction, namely 1.1 Integration of IT Strategy with Business Strategy

- **IT Innovation and Exploitation** - This group will provide the strategic IT exploitation and innovation interface to the IT service provider. This group is required to address the issue arising from the external research that in general an IT service provider's commitment to IT innovation and exploitation has been poor

  The IT strategic technology exploitation group are accountable for a key activity within the controlling Sub System 3 - Change Management, namely 3.3 - Joint IT Innovation and Exploitation

As explained earlier, a key objective was to ***'knit'*** together and create ***'fusion'*** (Brancheau, Janz and Wetherby (1996), both strategically and operationally between the Royal Mail Retained IT Unit and the IT service provider organisations. The meetings and forums detailed within the proposed Royal Mail / IT Service Provider relationship model sought to achieve effective system, process and activity integration between the Royal Mail Retailed IT Unit and the IT service provider organisations and constitute the physical relationship interfaces required within the overall IT Governance Framework. The roles of the relationship meetings and forums are summarised as follows:

**Joint Executive Board**

The literature review has highlighted the requirement to ensure that IT governance has the priority and support of senior executives involved in the IT outsourcing relationship. This issue is articulated by Gerrard (2003):

***'IT managers must present a strong case for IT governance by demonstrating its link to improved business performance, or senior business management will regard IT governance as an ' IT activity' and deny it the priority and support it needs'***

The ***'priority and support'*** was sought by the formulation of the joint executive board which had representation from senior executives from Royal Mail and the IT service provider organisations.

The literature review has highlighted that ***'trust' is*** one of the most desired qualities in any close relationship (Anderson and Narus 1990, Ganesan 1994, Henderson 1990, Sabherwal 1999 and Kim and Lee 1999). Therefore an objective of the joint steering board is to assist with building ***'trust'*** at a senior level within the overall IT outsourcing relationship.

The Joint Executive Board is accountable for discharging key activities within the IT Governance Framework Sub System 1 – Setting Strategic Direction. Specific areas of accountability, which are linked to the IT Governance Framework systems, activities and processes, are as follows:

- Ensuring that the IT service provider understands and is aligned with the Royal Mail business and IT strategic direction
- Agreement of high level requirements for:
  - IT Policies and Standards
  - Organisation accountabilities and responsibilities
  - Appropriate levels of IT skills and professionalism
  - Production and agreement of common objectives based on a ***'shared risk / reward'*** philosophy

**Change Management Board**

The Change Management Board is accountable for discharging key activities within the IT Governance Framework Sub System 3 - Change Management. Specific areas of accountability, linked to the IT Governance Framework systems, activities and processes, are as follows:

- Ensuring the effective management of Royal Mail's portfolio of projects and programmes within an appropriate project and programme methodology

- Agreeing and implementing changes and improvements to IT services

- Agreeing and implementing major IT service contract improvement and change

**Supplier Performance and Service Management**

The Supplier Performance and Contract Management group is accountable for discharging key activities within the IT Governance Framework Sub System 2 - IT Service Management and Delivery. Specific areas of accountability, linked to the IT Governance Framework systems, activities and processes, are as follows:

- Overall responsibility for the ***'day to day'***, IT performance and delivery management which includes the following:

    - Management of the Royal Mail IT Retained Unit / IT service provider commercial interface process

- IT Service management activities (including managing the agreed Service Level Agreements (SLA'S) and Key Performance Indicators (KPI's))

- Reviewing the IT service in terms of performance against agreed metrics and targets

- Responsibility for effective communications

**Strategic Information Exchange**

The Strategic Information Exchange is accountable for discharging the requirements of a key activity within the IT Governance Framework Sub System 1 – Setting Strategic Direction, namely activity area 1.1 - Integration of IT Strategy with Business Strategy.

The literature review had highlighted the importance of ensuring integration and alignment of business and IT strategies (Brancheau, Janz and Wetherby (1996), Plowman (1998) and Farrell (2003) Chan, Huff, Barclay and Copeland (1997)). Specific areas of accountability of the strategic information exchange group, linked to the IT Governance Framework systems, activities and processes, is as follows:

- Ensuring that an IT strategy and associated IT demand plan is formulated within the Royal Mail Retained IT Unit for deployment by the IT service provider. The IT strategy will be integrated and aligned with the overall Royal Mail business strategy

**Joint Technology Forum**

This forum addresses an external research issue that commitment to IT innovation within an IT outsourcing environment has generally been inadequate. This view was supported by research of Gartner (2002) and Meta (2002). The Joint Technology Forum has key accountabilities for discharging the requirements of a key activity within the IT Governance Framework Sub System 3 – Change Management, namely activity area 3.3 - Joint IT Innovation and Exploitation.

Specific areas of accountability of the joint technology forum, which are linked to the IT Governance Framework systems, activities and processes, are as follows:

- The Joint Technology Forum provides the relationship interface between the Royal Mail Retained IT Unit and the IT Service provider's innovation centres of expertise. This interface seeks to identify and deploy IT innovation and exploitation opportunities which seek to achieve business benefit for both organisations

  Note that an agreement with the Research Programme Team was, as with the IT Governance Framework, that the proposed Royal Mail / IT service provider relationship model should be included within the IT contract schedules and be subsequently implemented when the IT outsourcing arrangement is entered into. This inclusion and implementation should be after appropriate vetting by external contract lawyers and consultants and negotiation /agreement with the IT service provider

To summarise this Chapter, The IT Governance Framework and the Royal Mail / IT Service Provider relationship framework were applied within the Royal Mail IT outsourced environment. The next Chapter provides details of this application, along with providing an ***'observation'*** of these frameworks in practice.

# Chapter 7

# Observation of the Information Technology Governance Framework

## 7.1 Action Research – Observation

In June 2003 Royal Mail entered into an IT outsourcing arrangement with an IT service provider. This IT outsourcing arrangement comprised a total outsource of Royal Mail IT capability and was valued at around £1.5 Billion over a ten-year period.

The IT outsourcing arrangement involved a significant transfer of Royal Mail IT assets, this in common with what is termed a ***'total outsourcing'*** strategy. This involved the re deployment of over 1700 IT staff from Royal Mail to the IT service provider. The IT outsourcing contract represented one of the largest ever signed in the United Kingdom.

The IT Governance Framework and the Royal Mail / IT service provider relationship model developed, constructed earlier within this thesis, were implemented within the Royal Mail IT outsourcing environment and formed the basis for the governance and relationship interfaces between Royal Mail and the IT service provider. Also, the contract principles also developed and constructed earlier within this thesis were adopted as ***'real world'*** contract principles.

Following an initial IT outsourcing 'settling in' period of 1 year, I carried out a review (or in action research terminology, the ***'observation'***) on how effective the theoretically derived IT Governance Framework, the Royal Mail / IT service provider relationship model and IT contract principles were in a ***'real world'*** environment. The review also addressed a central issue for Royal Mail, namely:

***Is IT Outsourcing delivering the anticipated business benefits for Royal Mail?***

This review took place over a period of two calendar months and, in order to achieve a balanced view, involved taking input from a cross section of 20 senior managers (including previous members of the Research Programme Team) who worked within

the IT outsourcing environment for either Royal Mail or the IT service provider. An objective of taking input from managers from both within Royal Mail and the IT service provider was to ensure that a balanced view is obtained of the IT outsourcing environment. These managers were selected on the basis that they had experience of, and exposure to, the full Royal Mail IT outsourcing environment and they would be able to fully engage with any questioning relating to either the IT Governance Framework, the Royal Mail / IT service provider relationship model or the IT service contract principles.

The format of the review was to use semi - structured interview sessions with the senior managers. The interview sessions took place at the Royal Mail and IT service provider's respective premises and lasted typically 3-4 hours. To ensure that my interpretation of the interview dialogue was accurate the interviews were transcribed by myself and submitted to the interviewees for approval. The questions used for the interview sessions were open in nature and broadly covered the following areas:

- ***How effective is the IT Governance Framework and what are the problems and improvement opportunities?***

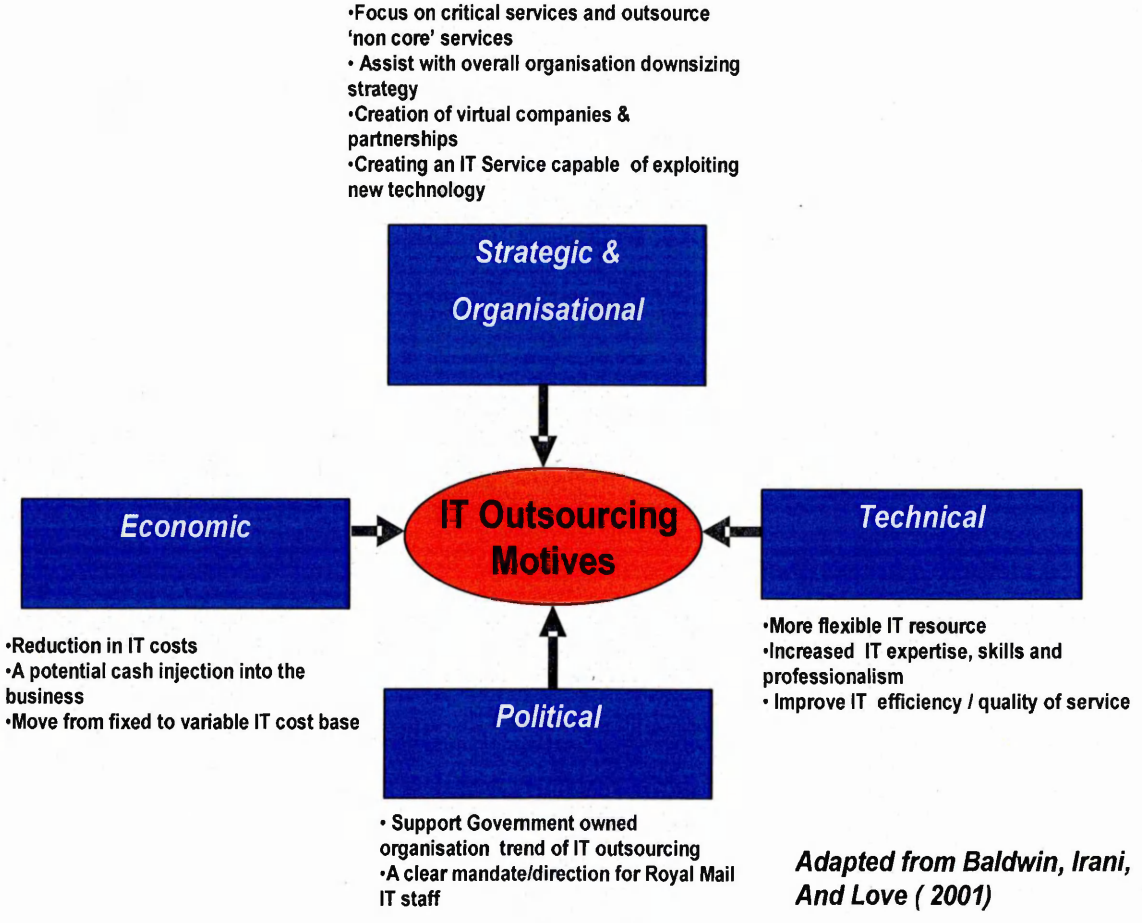
- ***How effective is the Royal Mail / IT service provider relationship model and what are the problems and improvement opportunities?***

- ***How effective are the IT service contract principles and what are the problems and improvement opportunities?***

### 7.1.1 Is IT Outsourcing within Royal Mail Delivering the Anticipated Business Benefits?

To address this question the interview sessions provided an opportunity for me to re-visit the Royal Mail IT Outsourcing motives and anticipated benefits and verify, via the interview sessions, what benefits may have been realised in a post IT outsourcing environment. This activity enabled me to test the some of the constructs relating to IT outsourcing anticipated benefits, which were theoretically derived within a practical IT outsourcing environment. The figure that follows contains the Royal Mail IT outsourcing motives and anticipated benefits and was constructed earlier in this thesis as a result of my pre IT outsourcing dialogue with key Royal Mail stakeholders:

**Figure 7.1 - The Royal Mail IT Outsourcing Motives and Anticipated IT Outsourcing Benefits**



The figure was used within the interview sessions as an aid to verify if the Royal Mail IT outsourcing motives were still valid and if the IT outsourcing anticipated benefits have been realised within a ***'real world'*** practical environment. Under the main Royal Mail motive headings, namely ***'Economic'***, ***'Strategic and Organisational'***, ***'Technical'*** and ***'Political'*** the key findings and observations arising from the interview sessions were as follows:

## Economic

### *Reduction in IT Costs*

This thesis has previously referred to the research of Morgan Chambers (2001) who highlighted that the biggest single reason why organisations outsource their IT capability is to seek a reduction in IT services financial costs. Also this thesis has previously referred to the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001) who have all argued, in varying degrees, that IT outsourcing was failing to deliver anticipated business benefits (including delivery of financial benefits).

Set against this background, the interviews highlighted that Royal Mail managed to achieve the year one IT outsourcing cost savings objectives which formed part of the IT outsourcing business motives and objectives (for reasons of strictest commercial confidentiality the extent of these savings cannot be published). The fact that Royal Mail achieved these financial savings in a ***'real world'*** IT outsourcing environment is a challenge, and indeed, contradiction to the various academic sources named above who have argued that IT outsourcing may not be delivering financial benefits. Although the year one financial savings have been achieved the anticipated IT outsourcing financial benefits cover the 10 year period of the IT outsourcing contract. Therefore this thesis can only comment on the year one or 'short term' financial benefits of the Royal Mail IT outsourcing arrangement.

***A Potential Cash injection into the Business***

The sale of IT assets which included IT hardware (e.g. PC's, printers), software, IT processing capability (e.g. mainframe) to the IT service provider meant that the Royal Mail objective of creating a ***'cash injection into the business'*** was achieved. For reasons of strictest commercial confidentiality the extent of this cash injection cannot be published.

***Move from a Fixed to Variable IT Cost Base***

The transfer of all IT assets along with 1700 IT staff to the IT service provider resulted in the Royal Mail objective of ***'moving from a fixed to variable cost base'*** being achieved. Under the newly created variable cost structure any problems with fluctuations in IT demand were passed onto the IT service provider. Therefore, Royal Mail has created a more flexible or ***'variable'*** way in managing its IT demand requirements. From an IT service provider perspective the creation of a variable cost base has not created a ***'win / win'*** situation as they have been presented with the risk that any reduction in IT demand may result in them having IT resource that may not be required.

## Strategic and Organisational

***Focus on critical services and outsource 'non core' services***

As detailed previously the view of the Royal Mail board was that IT was ***'non core'*** to the overall business and therefore IT represented a legitimate service to outsource. By outsourcing its IT capability, the view from within Royal Mail was that it was able to focus more on its business critical services such as high volume mails and parcels delivery and distribution.

***Assist with overall organisational downsizing strategy***

As detailed previously, at the time of considering IT outsourcing, Royal Mail had announced a business need to reduce their workforce by a minimum of 10,000 employees. The outsourcing of Royal Mail IT capability resulted in 1700 Royal Mail IT staff transferring to the IT service provider. The transfer of these staff was deemed by Royal Mail to be a significant contribution to the overall requirement to reduce its overall workforce.

***Creation of virtual companies and partnership***

The outsourcing of Royal Mail's IT capability resulted in the creation of a virtual IT service provider organisation. The interviews highlighted that, although a virtual company had been created, the partnership which was sought with the IT service provider was not forthcoming. The reasoning and evidence with respect to why this partnership had not been created will be included later in this chapter.

***Creating an IT Service Capable of Exploiting New Technology***

The interviews provided evidence that the Royal Mail objective of creating an IT service capable of exploiting new technology was not achieved at this stage of the IT outsourcing relationship. There was, however, evidence that significant focus was exerted by both Royal Mail and the IT service provider on driving efficiency and added value from the existing portfolio of IT products and services. Because of this there appeared to be insufficient focus on exploiting new IT exploitation and innovation opportunities. This issue will be explored further later in this chapter.

## Technical

### *More Flexible IT Resource*

The view from both Royal Mail and the IT service provider was that a more flexible IT resource had been created as a result of IT outsourcing. Because of the dynamic nature of IT service provision Royal Mail had historically experienced variations in IT demand, or ***'peaks and troughs'***. The variations in IT demand within the Royal Mail IT outsourced environment were dealt with in a effective manner with the service provider managing to re-deploy IT resource to other IT contracts when any ***'troughs'*** in work occurred and, alternatively, managing to obtain IT resource from other areas of their organisation when ***'peaks'*** in IT demand were apparent. The interviews highlighted that because the Royal Mail IT service provider is a large global IT service provider they demonstrated the flexibility to deal effectively with fluctuations to IT demand. This may not have been the case if a smaller IT service provider had been utilised.

### *Increased IT Expertise, Skills and Professionalism*

The interviews provided evidence that the Royal Mail motive of increasing levels of IT expertise, Skills and Professionalism had not been achieved at this stage of the IT outsourcing relationship. As stated previously there was evidence that significant focus was exerted by both Royal Mail and the IT service provider on driving efficiency and added value from the existing portfolio of IT products and services. Because of this there appeared to be insufficient focus on increasing levels of IT expertise, skills and professionalism. This issue will be explored further later in this chapter.

### *Improved IT Efficiency / Quality of Service*

As previously detailed, a range of IT performance metrics were taken within Royal Mail before IT outsourcing. This was as a result of a research issue, highlighted from the external organisation interviews, that had not taken IT performance metrics before

IT outsourcing and subsequently had problems with measuring any potential benefits realisation within a post IT outsourcing environment. The interviews highlighted that Royal Mail achieved improvements to IT efficiency and quality of service in the following key areas:

- The target for year 1 savings in financial cost of IT service provision were achieved

- Improvements in IT performance and operations were achieved in the following areas:

  - Service incident fix times relating to hardware such as PC's and printers
  - Time to 'roll out' new IT software
  - IT System availability
  - IT helpdesk performance
  - IT service change request management processes and procedures

- Benefits realisation with respect to new IT projects and programmes and major IT service replacement, enhancements and improvement initiatives

- Increased Royal Mail customer satisfaction with the IT service provision

## Political

### *Support Government Owned Organisation Trend of IT Outsourcing*

The outsourcing of Royal Mail IT continued the trend of Government owned organisations outsourcing IT capability (past examples include the Home Office, Department of Work and Pensions and the Inland Revenue). This trend continued

with the Ministry of Defence and the National Health Service outsourcing their IT capability in 2005.

***A Clear Mandate / Direction for Royal Mail IT Staff***

This thesis has previously highlighted the tensions and conflict between Royal Mail senior management and the unions representing the employees within Royal Mail. Royal Mail senior management have strong business imperatives to ensure IT outsourcing takes place whilst the unions see IT outsourcing as ***'privatisation through the back door'***. The unions also realised that if IT outsourcing took place they would be left with significantly less membership within Royal Mail as IT staff transfer across to the IT service provider.

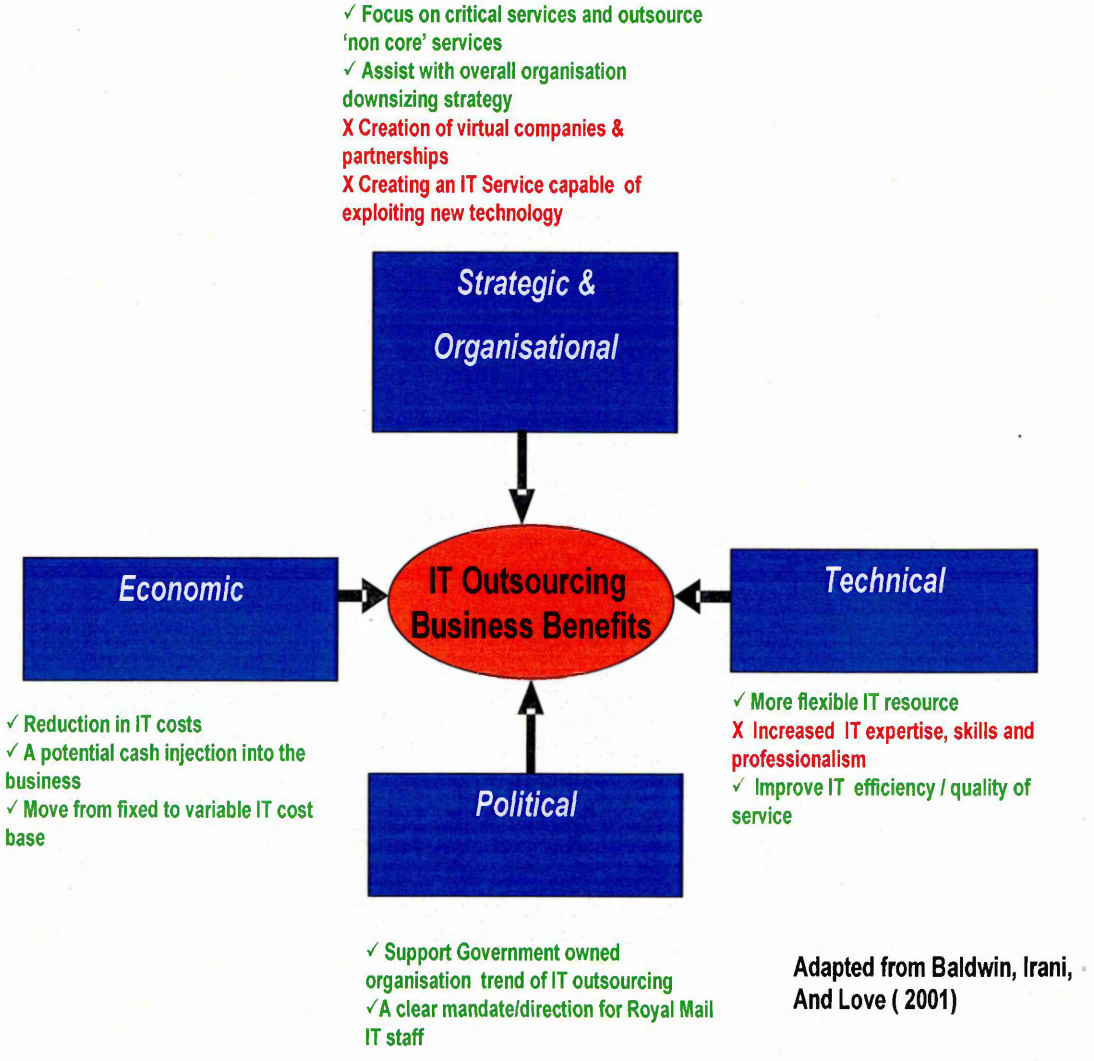
Other sensitivities, which were managed throughout the IT outsourcing process, were the terms and conditions under which IT staff will transfer to the IT service provider. The unions saw it as imperative to ensure that existing terms and conditions of transferring employees are maintained. Of particular importance was maintaining the Royal Mail redundancy terms and conditions which, by external comparisons, are deemed attractive (for example, at the time of writing Royal Mail has a policy of no compulsory redundancies and has a generous voluntary redundancy framework)

The outcome of the Royal Mail IT outsourcing process resulted in the Royal Mail IT staff being transferred to the IT Service provider under 'Transfer Undertaking for Protection of Employment' (TUPE) conditions. The TUPE conditions ensured that the existing employment terms and conditions of transferring IT staff would be maintained. This ensured that the unions and indeed transferring IT staff, concerns regarding not being able to maintain current employment terms and conditions were negated. This resulted in achieving the objective of a clear future mandate and direction for the transferring Royal Mail IT staff.

**Summary - The Royal Mail IT Outsourcing Motives and Realised Benefits**

The figure below provides a summary of where Royal Mail IT outsourcing benefits have been achieved and where benefits have not been realised:

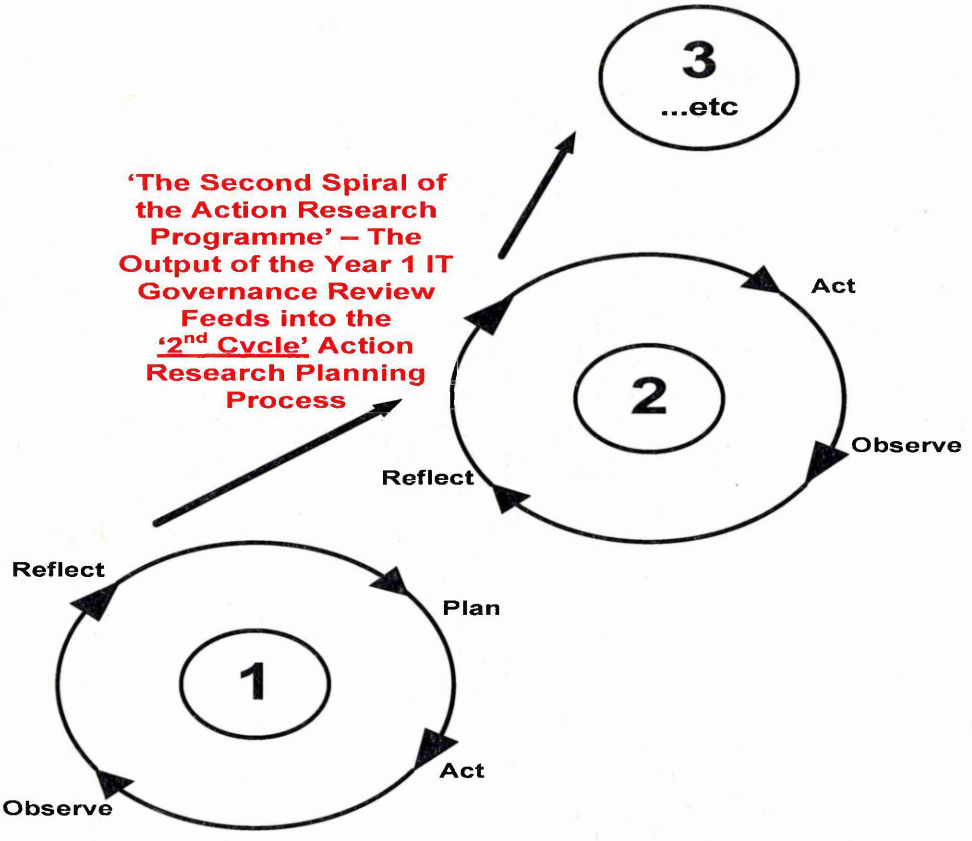
**Figure 7.2 - The Royal Mail IT Outsourcing Realised Benefits**




There have been specific areas identified where Royal Mail IT outsourcing is not delivering the anticipated benefits (shown in red in Figure 7.2). These areas of concern will form an input to the second action research planning cycle, or in Zuber-

Skeritt terminology, the ***'second spiral'*** of action research. This is detailed in the Figure that follows:

**Figure 7.3 - Initiating the Second Spiral of Action Research**




**Source: Adapted Zuber-Skeritt (2001)**

Note that this research programme was completed following the Year1 IT governance review, however it was agreed with Royal Mail that the areas where benefits had not been realised (as detailed in Figure 7.2) would form an input to the year two Royal Mail / IT service provider planning cycle, in action research terminology this is concerned with the ***'Second Spiral'*** of action research.

These areas where benefits were not realised as highlighted in the Year 1 review, along with the associated actions discussed as part of the review, are detailed as follows:

- ***'Creation of Virtual Companies and Partnerships'*** - Although a virtual company had been created as a result of the Royal IT outsourcing arrangement the partnership that was originally sought was not forthcoming. Future focus by Royal Mails and it's IT service provider on achieving this goal would be as Gartner (2002) stated would be in ***'developing and implementing shared objectives and goals that are mutually acceptable'***

- ***'Creating an IT Service Capable of Exploiting New Technology'*** - The year 1 review had highlighted the 'transactional' nature of the Royal Mail / IT service provider relationship. It was agreed that next steps would be more in line with a 'transformational' approach where new technology innovation and exploitation would be at the forefront of future plans and activities

- ***'Increased IT Expertise, Skills and Professionalism'*** - At the end of year one there had been too much focus on driving value from existing products and services and therefore increased levels of IT skills and professionalism were not forthcoming. It was agreed that future plans would develop a new portfolio of products that would provide opportunity for staff with both Royal Mails and it's service provider to develop their levels of IT skills and professionalism

Other than the notable exceptions that will form part of the year two Royal Mail / IT service provider planning cycle, or ***'Second Spiral'*** of action research, IT outsourcing has delivered the anticipated benefits for Royal Mail. The benefits realised such as reducing IT costs, moving from a fixed to variable IT cost base and using IT outsourcing to assist with the overall IT outsourcing downsizing strategy was viewed by Royal Mail to be business critical activities.

The iterative, or continuous, nature of the action research process may result in new issues arising as a result of the future ***'spirals'*** of action research taking place. As these issues are addressed, then it may be expected that a continuous improvement cycle is generated which addresses the evolution of the Information Technology Governance Framework and the Royal Mail / IT service provider relationship.

The research findings have to a large extent contradicted the work of, for example, Gartner (2002) who estimated that 80% of IT Outsourcing deals failed to deliver their original anticipated business objectives. The research also contradicts the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001) who argued that IT outsourcing did not provide anticipated business benefits realisation. Indeed my own research within the organisations who had outsourced their IT capability highlighted that generally IT outsourcing business benefit realisation had been poor.

### 7.1.2 Observing the IT Outsourcing Governance Framework

As detailed previously, a key objective of developing and implementing an IT governance framework is to achieve a desired level of ***'control'*** to assist with business benefits realisation within the Royal Mail IT outsourcing environment. The ***'loss of control'*** issue within an IT outsourced environment was highlighted by research, including the work of Sherer (2004), Farrell (1999), Willcocks, Fitzgerald and Lacity (1996), Grover Cheon and Teng (1994), Gordon (1994) and Gallivan and Wonseak (2004).

The interviews and observations conducted within Royal Mail and their IT service provider however, provided evidence that contrary to the research by the various authors named above there was **no lack of control issue** within the Royal Mail IT outsourced environment. The research found that the IT Governance Framework had provided a sound platform for both Royal Mail and the IT service provider to manage and ***'control'*** the IT outsourcing relationship.

The interviews however observed a number of strengths, weaknesses and improvement areas of the IT Governance Framework within the Royal Mail IT outsourced environment. These were highlighted by analysing and observing the ***'real world'*** activities and processes of each of the IT Governance Framework sub systems, which constitute the overall IT Governance framework. The analysis and observation relating to each sub system of the IT Governance Framework is as follows:

**Sub System 1 - Setting Strategic Direction**

The sub system requirement to integrate **IT strategy with business strategy** was deemed to be successful. This was achieved by constructing and implementing an IT Strategy. The IT strategy was constructed and implemented, as previously suggested, as a collaborative effort between Royal Mail business and IT strategy formulators and the IT service provider who has responsibility for ensuring IT strategy deployment. The perceived success in integrating and aligning IT strategy with business strategy appears to have overcome the issues and concerns highlighted by Brancheau, Janz and Wetherby (1996), Plowman (1998), Farrell (2003) and Chan, Huff, Barclay and Copeland (1997) who have all have highlighted that within an IT outsourcing environment many organisations have experienced difficulty in aligning their business strategies and drivers with their IT strategies. It may be argued that this alignment has assisted with creating a ***'fusion'*** Van Grembergen (2002) of business and IT strategies within the context of the overall Royal Mail / IT service provider IT outsourcing relationship.

A further requirement of this sub system was to ensure that effective **IT policies and standards** are in place. As previously suggested a wide range of IT policies and standards were developed and implemented within the Royal Mail IT outsourcing environment. These policies and standards were agreed 'up front' as part of the IT service contract negotiations and were viewed as an important mechanism in providing guidance and direction within the context of the overall IT outsourcing relationship.

This sub system aimed to have **organisational accountabilities and responsibilities** in place to ensure an effective interface between the customers and IT service provider organisations. As previously argued this would prevent the confusion and duplication of effort which was highlighted in my research carried out with the organisations that had outsourced their IT capability. As with the IT policies and standards, the accountabilities and responsibilities were agreed 'up front' as part of the IT service contract negotiations and enabled ***'Clear decision making rights and accountabilities'*** (Dallas 2004) to be achieved within the Royal Mail IT outsourced environment.

This sub system also requires adequate levels of **skills and professionalism** to be present within the Royal Mail IT outsourced environment. The interviews, however, highlighted that this was an area of concern, and as highlighted previously, there was evidence that significant focus was exerted by both Royal Mail and the IT service provider on driving efficiency and added value from the existing portfolio of IT products and services. Because of this issue there appeared to be insufficient focus on increasing levels of IT expertise, skills and professionalism. The main areas identified where skills and professionalism were inadequate were in the areas of IT change management. The specific areas of concern cover inadequate skills and professionalism in the areas of Project and Programme Management, IT service and contract improvement and change and joint IT innovation and exploitation. A general research finding was that there was a commitment to provide and develop skills and professionalism to drive value from existing IT products and services but a reluctance to provide new skills and professionalism to drive IT service improvement and innovation and exploitation.

The final requirement for this sub system was to have common objectives based on **shared risk / reward** within the Royal Mail IT outsourced environment. The interviews highlighted that this objective has not been achieved at present. The previous research within the external organisations that had outsourced their IT capability had highlighted that common objectives based on a shared risk / reward philosophy had proved successful in providing and setting direction that would ensure that shared customer and IT service provider benefits are realised. The interviews highlighted that these shared benefits, achieved within a shared risk / reward

philosophy, were not being realised within the Royal Mail IT outsourcing environment.

**Sub System 2 - IT Performance and Service Management**

Previous reference has been made to **IT service management** as a key mechanism of this sub system where the dialogue or ***'social exchange'*** occurs between the customer and the IT service provider. It has also been argued that the IT service management interface is a mechanism where ***'trust'***, a basic concept of social exchange theory, may be developed between the customer and the IT service provider. The literature review has highlighted that ***'trust'*** is one of the most desired qualities in any close relationship (Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999)).

The interview sessions highlighted that the IT service management interface which, as previously detailed, is based on the industry standard IT Infrastructure Library (ITIL) service management methodology, has assisted with providing an effective interface where a level of ***'trust'*** has been developed within the overall context of the IT outsourcing relationship. There has been significant effort within Royal Mail in ensuring adequate training and development has taken place to ensure that the ITIL service management principles have been successfully implemented. Also the interviews highlighted that the management of **IT performance** (again based on ITIL standards) had also proved an effective mechanism to assist with the management of the overall IT outsourcing relationship.

This sub system had also addressed the concern previously highlighted within Royal Mail of moving from an internal, largely transaction driven, internal IT service provision to a highly commercial and contractual IT outsourcing environment. These concerns were also articulated by Heckman (1999) and Beulen and Ribbers (2003) who's work on the ***'IT Outsourcing: Incomplete Contract Theory'*** highlighted that the ***'commercial interfaces'*** within an IT outsourcing environment are a problem area for both the customer and their respective IT service providers.

To address these concerns this sub system sought to implement **commercial interface processes** which would assist with the move to a highly commercial IT outsourced environment. The interviews highlighted that these commercial interfaces took a significant amount of 'bedding in' with initial problems with Royal Mail staff not recognising that commercial transactions were now taking place as opposed to the previous internal (non financial ) transactions with the previous IT internal supplier. The interviews highlighted that the initial commercial interface problems were being overcome by educating users on the contractual interfaces and nature of the IT outsourcing arrangement however the interviews highlighted that the initial IT outsourcing period experienced similar commercial problems that Heckman (1999) and Beulen and Ribbers (2003) articulated.

The final requirement for this sub - system was to have **effective communications** within the Royal Mail IT outsourced environment. My external research had highlighted that the customer and IT service providers had a tendency to communicate in individual ***'silos'***. To address this issue a Royal Mail / IT service provider joint communication plan was developed and implemented. The interviews highlighted that this joint communications plan was developed and implemented within the Royal Mail IT outsourcing environment. This plan ensured that an effective integrated communication approach (as opposed to an individual silo approach) was successfully adopted within the context of the overall IT outsourcing relationship.

**Sub System 3 - IT Change Management**

The external research highlighted the requirement to have a robust industry standard **project and programme management** methodology in place within an IT outsourcing environment. As detailed previously the methodology utilised by Royal Mail and its IT service provider to assist with driving change in the IT outsourced environment is entitled Projects in a Controlled Environment (PRINCE). The interviews highlighted that the PRINCE methodology has been adopted and there has

been significant effort by both Royal Mail and it's IT service provider to provide relevant PRINCE training to respective users.

This sub-system also includes a mechanism to address **IT service improvement and change**. In common with research findings provided earlier within this chapter the interviews highlighted that although there has been some success in improving IT products and services and improvements to the contractual arrangements the primary focus has been on driving value with respect to improvements to existing ***'business as usual'*** IT services / activities. Therefore the interviews have highlighted that new IT service and contract improvement and change initiatives had to some extent been inadequate.

The final area of this sub system addresses the area of joint **IT innovation and exploitation**. The interviews highlighted that, in common with the previous research findings, there was evidence that significant focus was exerted by both Royal Mail and the IT service provider on driving efficiency and added value from the existing portfolio of IT products and services. Because of this there has been insufficient focus on exploiting new IT exploitation and innovation opportunities.

**Sub System 4 - Benefits Management**

The interviews highlighted that the **IT balanced scorecard,** which formed part of the benefits management sub-system, ensured that IT performance metrics were set as targets for the IT service provider. These metrics were based on a baseline of previous internal IT services provision and ensured that the IT outsourcing anticipated benefits were monitored to ensure that potential benefits realisation was tracked and measured. The introduction of the balanced scorecard and associated performance metrics was an improvement on an external research finding where some organisations that had outsourced their IT capability had not taken sufficient internal IT performance metrics before outsourcing. Therefore the organisations had no accurate data source on which to base any subsequent benefits measurement of IT outsourcing.

The other component of the benefits management sub-system is the **strategic contract annual review**. The interviews provided evidence that the 'Year 1' IT outsourcing annual review was currently in progress, and as detailed earlier, the review will provide analysis of the overall health of the outsourcing relationship and contract. As detailed earlier a key objective of the strategic contract annual review is to identify any potential benefits and relationship improvement opportunities and also to formally agree any IT services contract changes which may be required as a result of the review activities.

**Sub System 5 - Compliance Monitoring**

The interviews highlighted that the IT service provider had ensured **compliance** with the measures previously discussed. Examples of these included compliance with IT strategy, IT policies and standards and audit and risk management processes. The fact that no issues of non - compliance were raised was an extremely positive indicator within the overall context of the IT outsourcing relationship.

**Sub System 6 - Audit and Risk Management**

A component of the audit and risk management sub system is the **right and access to audit**. As previously detailed, a key learning point from the external research was the importance for the customer to retain the right and access to audit within the IT service provider organisation. The interviews highlighted that audits had been carried out on what were deemed to be business critical IT systems. As a result of these audits IT systems improvement plans were produced and subsequently implemented.

The other component of the audit and risk management sub system is **risk management.** The literature review has highlighted that IT outsourcing represents a dynamic and high-risk environment (Earl (1996), Aubert, Dussault, Patry and Rivard (1999), Bahli and Rivard (2003)). The interviews highlighted that the earlier research

proposal that Royal Mail provides a framework for how the IT service provider assesses and mitigates IT risks had been implemented.

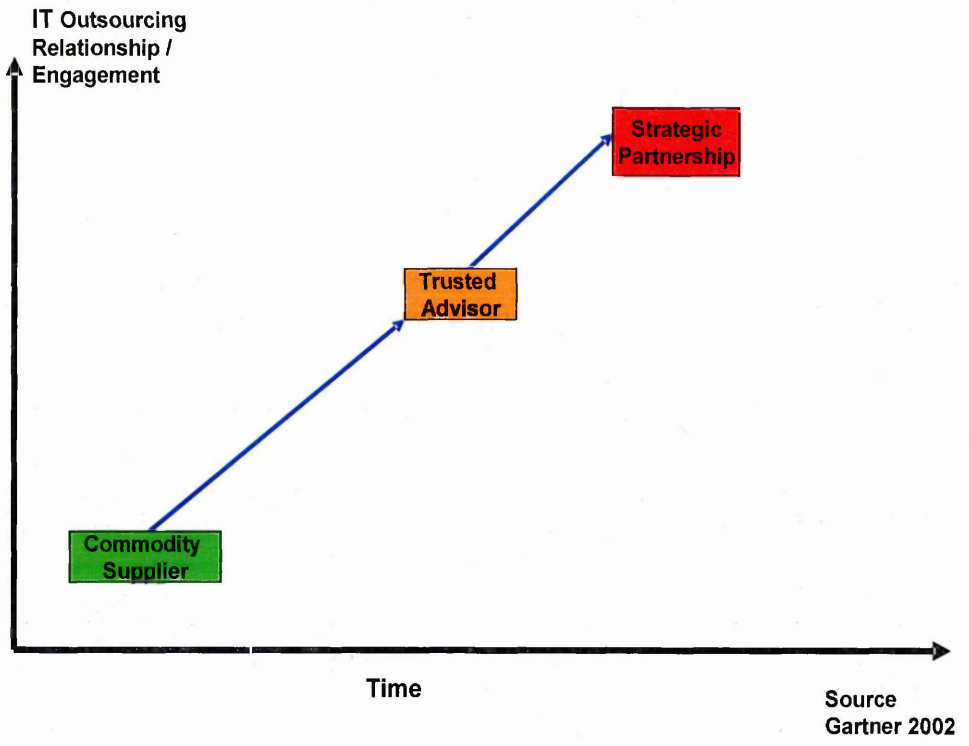
This framework was viewed to provide risk management alignment between Royal Mail and the IT service provider and was an improvement on the external research finding where some of the organisations, who had outsourced their IT capability, experienced difficulty in aligning their views on what constitute IT risks.

### 7.1.3 IT Outsourcing Governance Relationships

As stated earlier an objective of the IT outsourcing governance relationship proposals was to provide the ***'social exchange'*** between Royal Mail and the IT service provider. This relationship would be based on ***'trust'***, which is viewed to be one of the most desired qualities in any close relationship (Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999)).

The interviews provided the opportunity to analyse if this ***'trust'*** has been achieved within the context of the IT outsourcing relationship. To assist with this analysis the Gartner (2002) relationship model was utilised as part of the interview process. This model is detailed in the figure that follows:

**Figure 7.4 - The Gartner IT Outsourcing Relationship Model**




The Gartner (2002) relationship model details three types of potential IT outsourcing relationship maturity, which are summarised as follows:

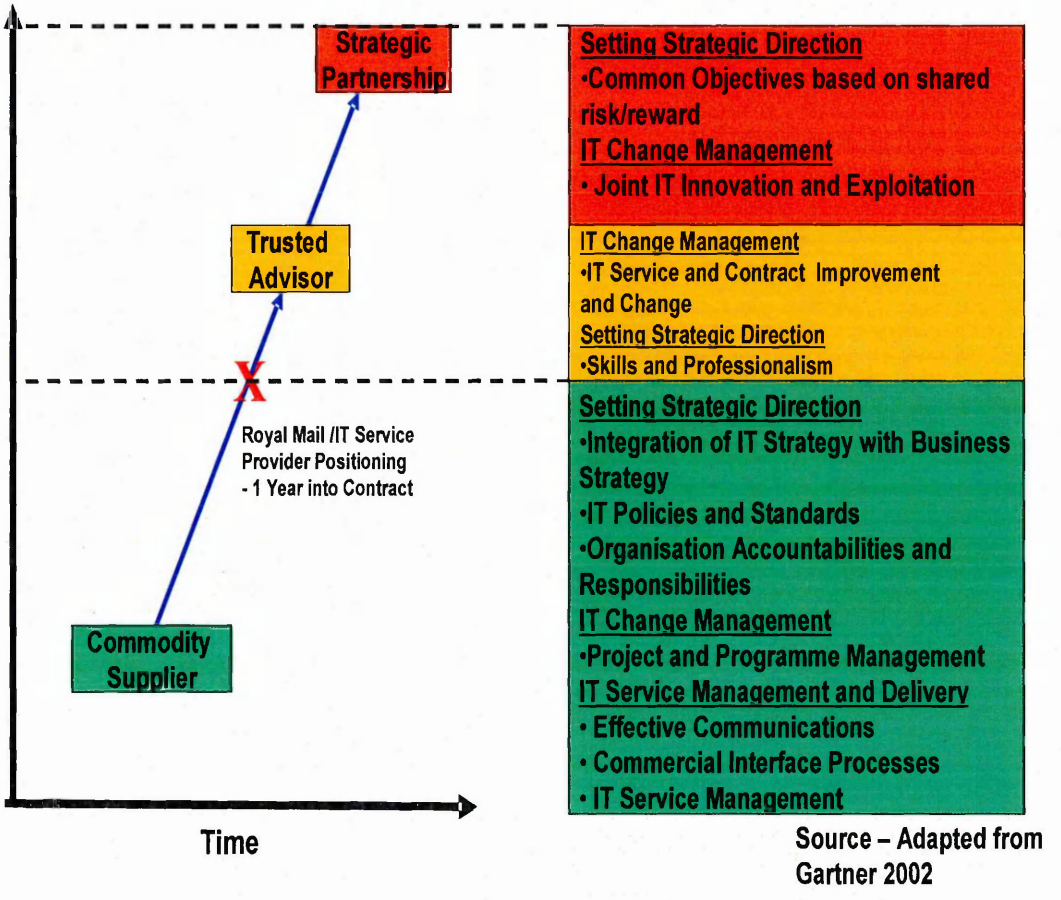
- **Commodity Supplier** - A largely transactional and non-integrated based relationship

- **Trusted Advisor** - The relationship is largely built on mutual collaboration and trust

- **Partnership** - This is viewed to be the most desirable relationship where the customer has shared objectives and goals and shared benefits from the relationship which may be based on a shared risk / reward philosophy

As the Gartner relationship models shows, the objective is for IT outsourcing relationships to move up the relationship value chain to the desired state of having a relationship which may operate as a partnership. As part of the interview process the interviewees were requested to position the current Royal Mail / IT service provider relationship using a combination of the Gartner relationship model and a stated view of the effectiveness of the IT Governance Framework and processes in assisting with relationship maturity (from both current and future perspectives). The relationship positioning one year into the IT outsourcing contract is detailed in the figure that follows:

**Figure 7.5 - Royal Mail Relationship Maturity Positioning Using the Gartner IT Outsourcing Relationship Model**




The previous figure details that the aggregated maturity positioning of the Royal Mail outsourcing relationship is well in advance of the ***'commodity supplier'*** relationship definition. However, it falls short of a ***'trusted advisor'*** relationship. The adapted Gartner relationship model also details the perceived IT Governance Framework processes and activities, stated during the interview sessions, which may assist with enabling the IT outsourcing relationship to further mature to what Gartner (2002) have defined as ***'trusted advisor'*** and the ***'partnership'*** stages of the IT outsourcing relationship. These areas identified for improvement will form the focus of the second (or year 2) relationship planning cycle, or part of the ***'Second Spiral'*** of the Royal

Mail / IT service provider engagement in an action research context. The improvement areas are summarised as follows:

- **IT Skills and Professionalism** - A research finding, highlighted previously, in this chapter is that there has been a commitment to provide and develop skills and professionalism to drive value from existing IT products and services, however, there was a reluctance to provide new skills and professionalism to drive IT service improvement and innovation and exploitation. Future focus would therefore be to increase levels of IT skills and professionalism

- **IT Service Contract Improvement and Change** - Although there have been some improvements in current IT services the interviews highlighted that the main focus has been on driving value from existing IT products and services. This has resulted in insufficient focus on new IT service change and improvement initiatives, agreement was reached between Royal Mail and it's Service provider that the year 2 planning cycle would incorporate contract improvement and change initiatives

- **Joint IT Innovation and Exploitation** - The interviews highlighted that, in common with the case study research findings, and as detailed earlier in this chapter, there was evidence that significant focus was exerted by both Royal Mail and the IT service provider on driving efficiency and added value from the existing portfolio of IT products and services. Because of this there appeared to be insufficient focus on exploiting new IT exploitation and innovation opportunities, again this concern would form an input into the second planning cycle

- **Common objectives based on Shared Risk / Reward** - As detailed earlier within this chapter the interviews highlighted that any potential shared benefits, achieved within a shared risk / reward philosophy, were

not being realised within the Royal Mail IT outsourcing environment. Again the perception was that the ***'shared risk/reward'*** philosophy was not currently adopted because of the main focus on driving value from existing IT products and services. As detailed earlier, the second planning cycle would include the development of a 'transformational' approach which would seek to harness IT innovation and exploitation opportunities

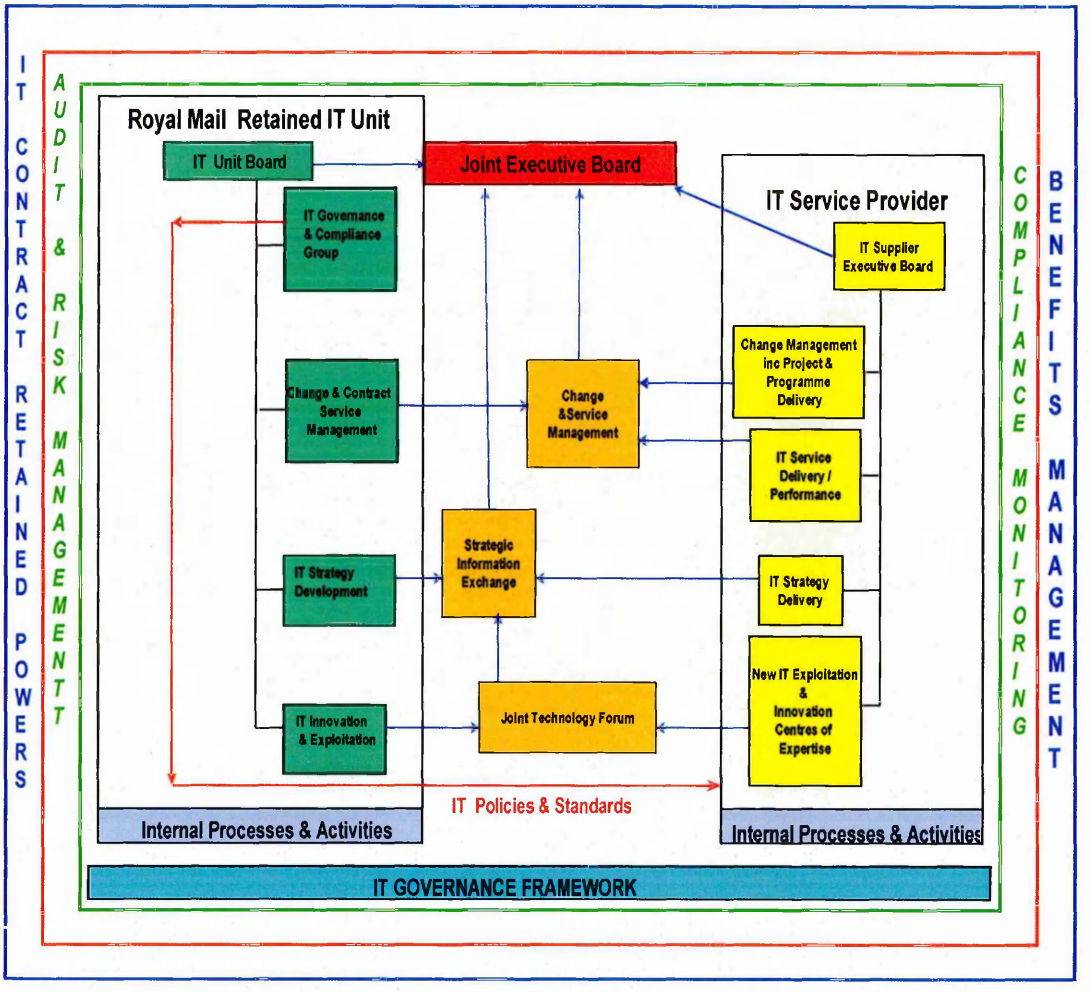
The activities highlighted above were viewed to be important aspects in moving the Royal Mail IT outsourcing relationship to the originally defined objective of achieving a mutual objective of a ***'strategic partnership'*** between Royal Mail and it's IT service provider. Governance of IT outsourcing partnerships has been defined by Lacity and Hirsheim (1993), Willcocks and Fitzgerald (1994), Corbett (1994) and Klepper (1995) as:

***'Realising the mutually set goals of the IT outsourcing relationship'***

A forthcoming objective of Royal Mail and their IT service provider will be to create an environment where ***'mutually set goals'*** can be set and subsequently realised. Using the previous terminology the relationship would be based on sharing the ***'risks and rewards'*** associated with these mutually set goals.

The interviews highlighted a specific improvement opportunity with respect to the originally defined Royal Mail / IT service provider relationship model. The original relationship model included two relationship bodies, which were entitled the Change Management Board and the Supplier Performance and Service Management Group. In the ***'real world'*** Royal Mail IT outsourcing environment these two bodies experienced overlap and some duplication with respect to their originally defined change management and supplier performance and service management activities. To address this issue of overlap and duplication the improvement opportunity was, during the course of the first year of the IT outsourcing arrangement, to combine these two bodies into one new relationship body which was named **Change and Service Management.** The revised Royal Mail / IT service provider relationship model is detailed in the figure that follows:

**Figure 7.6 - The Revised Royal Mail / IT Service Provider Relationship Model**




The revised, and simplified, governance relationship model would be used from year two onwards of the Royal Mail IT outsourcing arrangement. It would therefore from part of the ***'Second Spiral'*** of action research to which Zuber-Skeritt(2001) refers.

### 7.1.4 Observing the IT Outsourcing Contract Principles

The interviews provided an opportunity to find how effective the previously defined and implemented IT service contract principles were within the Royal Mail ***'real world'*** IT outsourced environment. The table below provides a summary of the observations relating to each contract principle:

**Table 7.1 - Observation of the IT Outsourcing Contract Principles**

| Contract Principle | Observations |
|---|---|
| ***1.0 Agree the IT Governance Framework as part of the outsourcing negotiations*** | The fact that the IT Governance Framework had been agreed as part of the outsourcing negotiations provided a sound working basis and ***'terms of reference'*** for all parties |
| ***2.0 Embed a 'Shared Risk / Reward' philosophy*** | It was agreed that a ***'shared risk / reward'*** philosophy was a sound strategy. However, in practice there was little evidence of this being achieved. The key focus was on individual rather than shared goals |
| ***3.0 Retain the Right and Access to Audit*** | Retaining the ***'right and access'*** to audit within the IT service provider had proved extremely valuable for Royal Mail |
| ***4.0 Measure IT performance metrics both before and after outsourcing*** | The fact that IT performance and costs were measured before outsourcing provided an accurate baseline to enable future benefits to be measured |
| ***5.0 Gain commitment to innovation and technology exploitation*** | It was agreed that a ***'commitment to innovation and technology exploitation'*** should be sought. However, in practice the key focus was on driving value from existing products and services |
| ***6.0 Define up front accountabilities and responsibilities*** | The upfront definition of accountabilities and responsibilities between the customer and IT service provider have prevented any confusion with respect to roles and responsibilities |

| | |
|---|---|
| ***7.0 Contract Schedules to be constructed 'In House'*** | Using in house staff (supported by external consultant and contract lawyers etc) to construct contract schedules assisted with preventing any knowledge transfer issues and created a sense of ownership |
| ***8.0 Have a contract exit management strategy*** | There is a ***'maintainable'*** contract exit management strategy in place which can be invoked at a future stage if required |

The table above highlights two problem areas which were the failure to both embed a ***'Shared Risk / Reward philosophy'*** and to gain commitment to ***'Innovation and technology exploitation'.*** All the other contract principles have added value within the context of the IT outsourcing relationship.

To summarise, this Chapter has ***'observed'*** the IT Governance and Royal Mail / IT Relationship frameworks and the IT outsourcing contract principles within the Royal Mail ***'real world'*** IT outsourced environment. The next Chapter provides a ***'reflection'*** upon the research programme outcomes and reflects upon what contribution to knowledge has been made throughout the course of this research programme.

# Chapter 8

# Reflection on the Research Outcomes - The Contribution to Knowledge

## 8.1 Action Research - Reflection: The Contribution to Knowledge

The final stage of the action research process was the ***'reflection'*** upon the research programme analysis, findings, proposals and indeed 'journey'. This chapter provides a reflection upon the following key question areas and research programme issues and objectives:

***1. What contribution to knowledge has been made? (This from both theoretical and practical perspectives)***

***2. A critical evaluation of the key research programme issues and findings, including:***

- ***Why is the research important and who cares?***
- ***What has been learned from my own practice and from this intervention and change?***
- ***What are the problems with and limitations of the research programme?***

As detailed earlier the two key objectives of this research programme were to provide both **theoretical / academic** and **practitioner** orientated contributions to knowledge with respect to addressing the problematic nature of the IT outsourcing phenomenon. These two objectives are summarised by the work of Pettigrew (1995,2001) who drew attention to the need for research to clear ***'double hurdles'*** which are simultaneously delivering ***'practitioner relevance'*** and ***'scholarly excellence'***.

The following paragraphs will therefore concentrate on clearing these ***'double hurdles'*** and will focus on both the **theoretical and practical** contributions to knowledge which have been achieved throughout the course of this research programme.

## 8.2 The Contribution to Theory

The following paragraphs provide a reflection upon what the **theoretical** contribution to knowledge has been achieved throughout the course of this research programme.

### 8.2.1 A Systems Approach to Addressing the IT Outsourcing Phenomenon

The use of systems ideas and thinking to explore and aid the development of theoretical frameworks and constructs to manage and ***'control'*** (my terminology used is to Govern) the IT Outsourcing phenomenon has in my knowledge not been carried out before and therefore represents an original contribution to knowledge. The adoption and use of systems ideas and thinking has heeded the advice of Wastell (1996) who argued that there is a danger of developing an overly rigid approach and an over dependence on the research methodology. As a result there is a danger of the researcher becoming ***'blinkered'*** and using the methodology as a ***'fetish of technique'*** This research programme has therefore used systems ideas and thinking (i.e. the use of root definitions and rich pictures) as a **facilitative device** rather than a ***'fetish of technique'*** to which Wastell refers.

This research programme provides an alternative systems based interpretation, and indeed approach, of how to apply systems methodology to address the study of the IT outsourcing phenomenon. This approach in itself represents an original contribution to knowledge which is open to scrutiny and critique from the academic and practitioner communities.

### 8.2.2 The Core Controlling the Periphery Debate

Earlier chapters of this thesis positioned IT outsourcing within the wider organisational context of the organisational trend towards what has been termed the ***'flexibility offensive'*** (Atkinson and Gregory 1986). This trend was also articulated by (Nichols 1986 and Prowse 1990) who identified the trend towards differentiating between what is ***'core'*** and what is ***'peripheral'.*** The argument put forward is that flexible organisations have been created by the stable and permanent ***'core'***

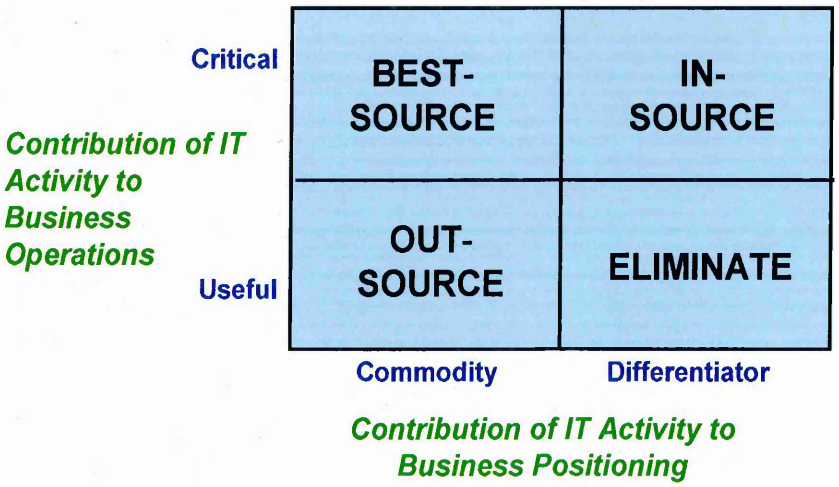
organising, managing and controlling a flexible and non permanent ***'peripheral'*** workforce.

This thesis has provided conceptual and theoretical frameworks which have added to the academic debate regarding how the ***'core'*** of an organisation manages and controls the ***'periphery'***. In the context of this research programme the core is the Royal Mail retained IT Unit and the periphery is the outsourced IT service provider.

### 8.2.3 An Emerging IT Outsourcing Model

This research programme has highlighted a new trend towards outsourcing what Lacity and Willcocks (2001) deemed ***'Critical Differentiator'*** services and products. The programme has challenged, and indeed provided a new perspective, to the work of for example Lacity and Willcocks (2001) who produced a ***'Business Factors Matrix'*** which is detailed in the figure that follows:

**Figure 8.1: Selective IT Outsourcing - The Business Factors Matrix**

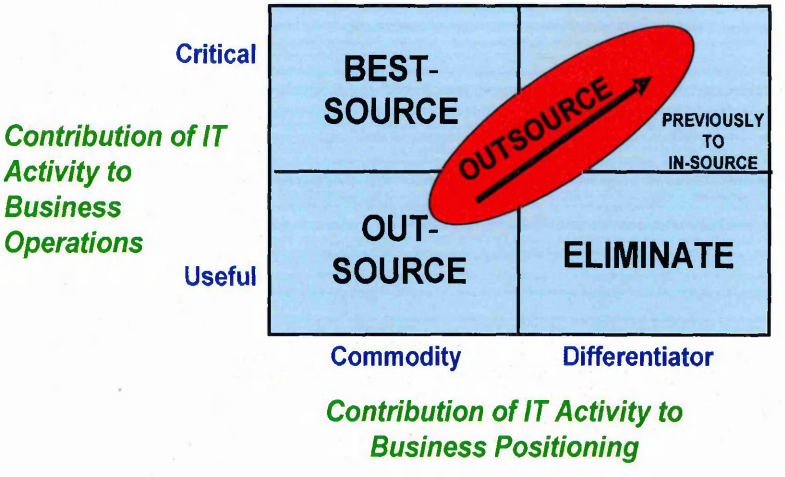



**Source- Lacity and Willcocks (2001)**

As previously detailed there was an agreement with the Royal Mail Research Programme Team that IT represents, what Lacity and Willcocks would term, a ***'Critical Differentiator'*** product. The rationale to this is that IT is critical to the Royal Mail business in terms of being central to, for example, letters and parcels delivery as well as being essential to customer management and service provision.

If the concepts detailed in the Business Factors Matrix were to be applied to Royal Mail then the view would be that Royal Mail should continue to ***'In Source'*** it's IT capability. This research programme has contradicted this view and the drivers highlighted previously (namely Strategic and Organisational, Technical, Political and Economic) have dictated that Royal Mail has been prepared to outsource its IT capability. Therefore this research programme has highlighted a new trend towards IT outsourcing which is detailed in the figure that follows:

**Figure 8.2 - The Emerging IT Outsourcing Matrix**




**Source- Adapted from Lacity and Willcocks (2001)**

Therefore this research programme has highlighted what is a new trend of organisations that are prepared to outsource what Lacity and Willcocks describe as ***'Critical differentiator'*** products and services.

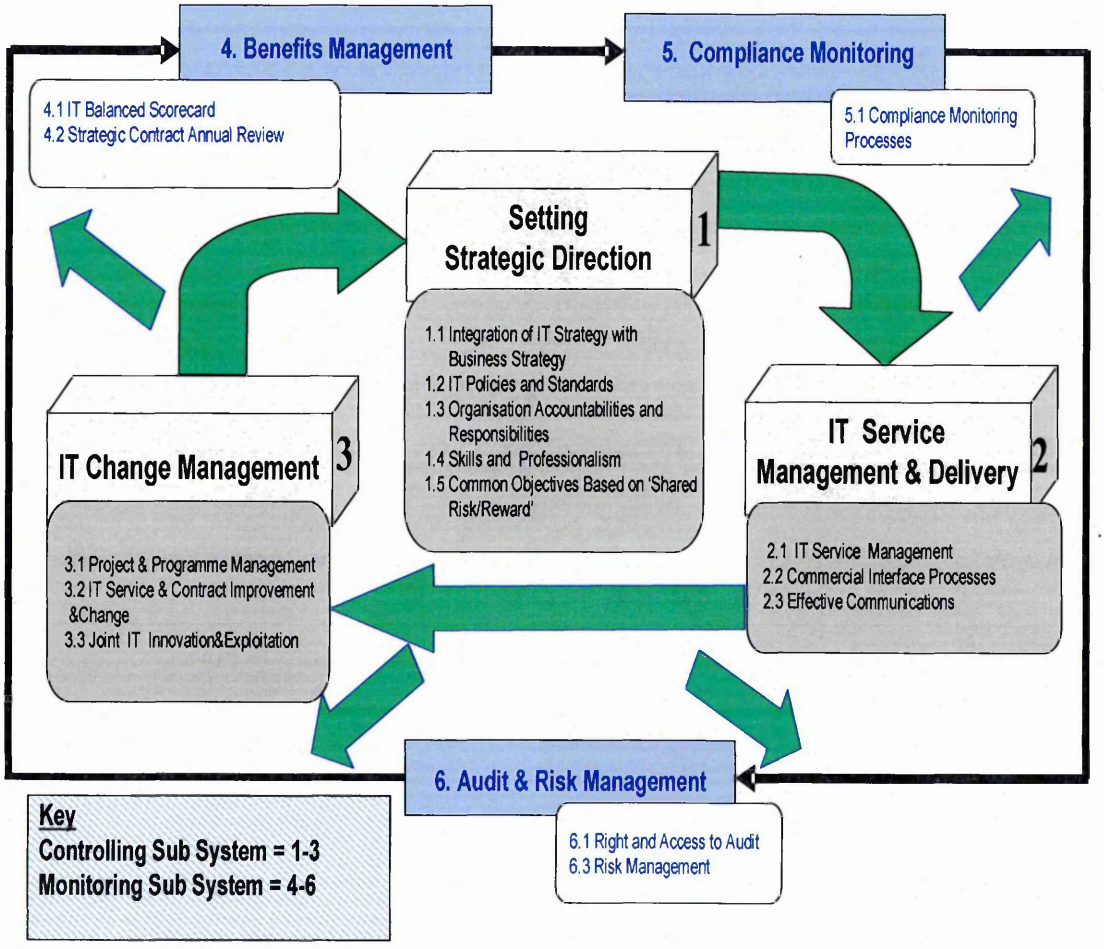
Note: This trend is supported by the strategies of the National Health Service (NHS) and Ministry of Defence (MOD) who outsourced their IT capabilities in 2005.

### 8.2.4 The Information Technology Governance Framework

This research programme highlights the trend towards outsourcing increasingly complex and business critical products and services such as IT.

Therefore, to address the governance and control over this increasingly complex IT outsourced environment, this research programme has developed and implemented an IT Governance Framework which is detailed in the figure that follows:

**Figure 8.3 - The IT Governance Framework**




Each controlling and monitoring sub system of the IT Governance Framework represents an original, systems derived, theoretical insight into how the IT outsourcing phenomenon should be governed. The following paragraphs reflect on these theoretical insights which are evident within each sub system of the overall IT Governance Framework.

**Controlling Sub System 1 - Setting Strategic Direction**

This controlling sub system addresses the problem areas identified within the external research and literature review (Brancheau, Janz and Wetherby (1996), Plowman (1998) and Farrell (2003) ) Chan, Huff, Barclay and Copeland (1997) ) that within an IT outsourcing environment many organisations have experienced difficulty in aligning their business strategies and drivers with their IT strategies.

This research programme has identified key processes and mechanisms (e.g. The Strategic Information Exchange Group) which will assist with creating ***'fusion'*** between business and IT strategies. Key to ensuring this fusion is created is having all the other elements of this sub system in place, namely:

- **IT Policies and Standards** which ensure that appropriate guidance and direction is provided for the Service Provider

- **Organisational Accountabilities and Responsibilities** which enable an effective interface between the customer and IT Service Provider organisations

- **Skills and Professionalism** have been identified as an essential ingredient to ensure successful IT service delivery. This research programme has analysed the skills and professionalism capabilities identified by Lacity and Willcocks (2001) and mapped these against the skills and professionalism requirements of the IT Governance Framework

  This mapping took place against the nine capabilities identified by Lacity and Willcocks, namely IS/IT Governance, Business Systems Thinking, Business - IT Relationship Building, Designing Technical Architecture, Making Technology Work, Informed Buying of IT Service, Contract Facilitation, Contract Monitoring and Vendor Development. As a result of

this mapping a number of new areas of required skills and professionalism were identified, these are summarised as follows:

- **IT Change Management** - For example skills associated with project and programme management, IT service and contract improvement and change and IT innovation and exploitation

- **Compliance Monitoring** - These are the requisite skills to ensure that the IT service provider complies with the agreed contractual and technology related requirements of the IT outsourcing arrangement

- **Audit and Risk Management** - These skills have ensured that effective processes and activities are in place to deal with the required audit and risk management requirements within an IT outsourcing environment

The new IT outsourcing capabilities, identified above, build upon the work of Lacity and Willcocks (2001) and represent a new and original theoretical insight into the emerging skills required to successfully operate within an IT Outsourcing environment

- **Common Objectives Based on 'Shared Risk / Reward'** - This has been incorporated and builds upon the work carried out by Gartner (2002) and Meta (2002) who have highlighted that a key success factor within IT Outsourcing arrangements is having common objectives and goals which are based on a shared risk/reward philosophy. Previous research (both from the IT Outsourcing literature review and the external research) has however highlighted that achieving this outcome within IT outsourcing relationships is extremely difficult. This research programme has supported this view and achieving a ***'shared risk/reward'*** philosophy within the Royal Mail IT Outsourcing has proved a step too far

This research programme has therefore highlighted there has been over emphasis by both Royal Mail and it's IT Service provider on their **individual** rather than **collective** goals and objectives. This is consistent with the previous work of, for example, Gordon (1994), Grover, Cheon and Teng (1994), Strassman (1995), Willcocks, Fitzgerald and Lacity (1996), Earl (1996), Farrell (1999) and McDowall (2001)

**Controlling Sub System 2 - IT Service Management and Delivery**

On reflection, this sub-system has provided a theoretical insight into how the social exchange occurs between the customer organisation and the IT service provider. The key elements of this sub-system that ensure that that this social exchange is carried out are:

- IT Service Management
- Commercial Interface Processes
- Effective Communications

It has been previously argued that the IT service management and delivery interface is a key mechanism where ***'trust'***, a basic concept of ***'social exchange theory'***, may be developed between the customer and the IT service provider. This research programme has built on the work of, for example, Anderson and Narus (1990), Ganesan (1994), Henderson (1990), Sabherwal (1999) and Kim and Lee (1999) who argued that ***'trust'*** is one of the most desired qualities in any close relationship.

On reflection the processes and mechanisms contained in this sub-system have enabled a new theoretical perspective to be developed which had an objective of creating a level of ***'mutual trust'*** between customer and IT service provider organisations.

**Controlling Sub System 3 - IT Change Management**

Farrell (2002) argued that ***'An efficient change function provides significant value to both vendor and customer'.***

However, this research programme has highlighted that many organisations, who have undertaken an IT outsourcing strategy felt that they did not adequately deal with IT change and therefore did not make use of the ***'significant value'*** to which Farrell refers. This research programme provides an original contribution to knowledge with respect to how effective change mechanisms may operate within an IT outsourced environment. These change mechanisms fall into three areas which are summarised as follows:

- ***Project and Programme Management***: It has been argued that the implementation of a robust project and programme methodology (Royal Mail has implemented PRINCE) within an IT outsourced environment has enabled successful delivery of IT projects and programmes and major change initiatives

- ***IT Service and Contract Improvement and Change***: This research programme has recommended that processes are put in place to deal with changes to the Royal Mail IT systems and the IT contract. Although there has been some success in improving IT systems and improvements to the contractual arrangements, my research has highlighted that the primary focus for both Royal Mail and the IT Service Provider has been on driving change with respect to ***'business as usual'*** activities, this opposed to seeking benefits from new improvement and change initiatives. This is a common issue with the external research that has been carried out as part of this research programme.

- ***Joint IT Innovation and Exploitation***: As stated previously, because there has been too much focus on ***'business as usual'*** activities, new initiatives such as joint IT innovation and exploitation have not been forthcoming. This provides support to my own research within organisations who had first hand experience of IT outsourcing and the research by Gartner (2002) and Meta (2002) who have both highlighted that the commitment to new IT innovation and exploitation between a customer organisation and outsourced company has generally been poor, bearing in mind that, innovation and technology exploitation is deemed to be a key change mechanism

**Monitoring Sub System 4 - Benefits Management**

This research programme also provides an original contribution to knowledge with respect to how effective Benefits Management may operate within an IT outsourced environment. These Benefits Management mechanisms fall into two areas which are summarised as follows:

- ***IT Balanced Scorecard:*** The IT balanced scorecard ensured that IT service performance metrics (i.e. financial, operational etc) were embedded within the IT outsourcing environment. This addressed a key issue arising from the research findings that, historically, organisations had failed to set and monitor performance of their IT service providers. Also a specific research finding was that organisations who had outsourced their IT capability had failed to take sufficient measurement of their pre-outsourcing 'in house' IT suppliers

  To address this issue this research programme ensured that internal pre-outsourcing performance metrics were taken before IT outsourcing took place. These metrics were then used as the baseline for subsequent external

IT outsourcing performance. This approach represents a key learning point arising from the research findings and a new approach to IT outsourcing benefits management

- ***Strategic Contract Annual Review:*** The key objectives of the strategic contract annual review are to identify IT service and relationship improvements. Again this activity has been embedded within the IT outsourcing arrangement as a result of a research finding which highlighted that some organisations had failed to review their IT outsourcing arrangements

**Monitoring Sub System 5 - Compliance Monitoring**

The external organisation research highlighted that some of the organisations, to some extent, disregarded compliance as being part of their responsibilities. They put the onus on the IT service provider to comply with customer requirements, and as a result, any failure to comply (with for example IT policies and standards) by the IT service provider were found ***'after the event'***.

To address this issue this research programme proposes an alternative approach to compliance where Royal Mail has put in place processes to ensure that their IT Service Provider complies with the requirements agreed within the IT outsourcing arrangement. The fact that no issues of non-compliance have been raised to date within the Royal Mail IT outsourcing arrangement is a key indicator that this alternative approach to compliance monitoring has proved to be effective.

**Monitoring Sub System 6 - Audit and Risk Management**

A further contribution to knowledge is the approach on how effective Audit and Risk Management may operate within an IT outsourced environment. This approach falls into two areas which are summarised as follows:

- ***Right and Access to Audit:*** This research programme has highlighted the importance for the customer to retain the right and access to audit within their IT service provider organisations. The audits (primarily on business critical systems) within the Royal Mail IT outsourced environment have ensured that issues and concerns have been identified and improvements plans put in place to address these

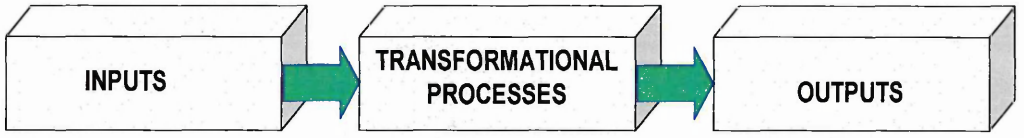
- ***Risk Management:*** This research programme has addressed an issue highlighted within the external research that risk management practices within an IT outsourced environment have been problematic. The research also builds upon the risk management work of Earl (1996), Aubert, Dussault, Patry and Rivard (1999) and Bahli and Rivard (2003) who have articulated that IT outsourcing represents a dynamic and high-risk environment.

  To address this issue this research programme has defined and implemented a risk management framework that ensures that the Royal Mail risks are identified and appropriate actions are put in place to ensure that these risks are mitigated.

### 8.2.5 The IT Governance Framework as a Model of Control

The work of Otley and Berry (1980) identified three activities (namely ***'Inputs'***, ***'Transformation Processes'*** and ***'Outputs'***) that must take place within a simple output based administrative control system. The figure that follows details these three activities along with a description of how these activities relate to the work carried out within this research programme:

**Figure 8.4: The Research Programme - An Output Based Administrative Control System**




| | | |
|---|---|---|
| •Systems Approach to Problem solving<br>• Action Research<br>•Information<br>➢ Based on both Academic and Practitioner perspectives<br>•Human Resources | • Processes contained in the IT Governance Framework, namely<br>➢ Setting Strategic Direction<br>➢ IT Service Management and Delivery<br>➢IT Change Management<br>➢Benefits Management<br>➢Compliance Monitoring<br>➢ Audit and Risk Management | • Control / Governance over the IT Outsourced environment<br>• IT Outsourcing benefits management and realisation<br>*Adapted from Otley and Berry 1980* |

Otley and Berry argued that for an output based administration system to be ***'controlled'*** then four criteria must exist. As the IT Governance Framework has previously been defined as a system that aims to ***'control'*** the highly complex IT outsourcing environment and, as the work of Otley and Berry (1980) informed some of the early rationale and thinking, within the context of this research programme it was useful to map the IT Governance Framework against the four Otley and Berry criteria for control. This mapping of the Otley and Berry elements of control against the elements of control of the IT Governance Framework is detailed in the table that follows:

**Table 8.1 - The Four Elements of Control Related to the IT Governance Framework**

| **The Four Elements of Control** *(Otley and Berry 1980)* | **Related elements of control within the IT Governance Framework** |
|---|---|
| **1.0 Objectives must exist** | **Setting Strategic Direction**, key elements include:<br>➢ Common objectives based on ***'shared risk / reward'*** |
| **2.0 Activities outputs must be measured** | **Benefits Management,** key elements include:<br>➢ IT Balanced Scorecard<br>➢ Strategic Contract Annual review |
| **3.0 Causes of non attainment of objectives must be determined / monitored** | **IT Service Management and Delivery**, key elements include:<br>➢ IT Service Management<br>➢ Commercial Interface Processes<br>**Compliance Monitoring, key elements include:**<br>➢ Compliance Monitoring Processes<br>**Audit and Risk Management,** key elements include:<br>➢ Right and access to audit<br>➢ Risk Management |
| **4.0 Capacity to take action relating to non attainment of objectives** | **IT Change Management,** key elements include:<br>➢ Project and Programme Management<br>➢ IT Service and Contract Improvement and Change<br>➢ Joint IT Innovation and Exploitation |

It was interesting to note, that although a systems approach has been used to develop the IT Governance Framework, the output has been that the criteria for ***'control'***, as defined by Otley and Berry, has been largely incorporated within the design of the IT Governance Framework.

In order to reflect upon the IT Governance framework as a 'model of control' it was useful to compare and contrast the framework against the previously explained COBIT and VAL-IT frameworks and their associated processes and domains. An important point to note is that the IT Governance Framework was designed in 2003 and applied within the Royal Mail IT outsourced environment in 2003-04. This design and application was therefore well in advance of the VAL-IT framework which was first launched in April 2006. This comparison is detailed in the table that follows:

**Table 8.2 - Comparison of IT Governance Framework with t he COBIT and VAL-IT Domains and Sub - Processes**

| **1.0 COBIT Framework Domains and Processes** | **Comparison of COBIT with IT Governance Framework Sub - Systems** |
|---|---|
| **Domain 1 - Planning and Organisation**<br><br>**Sub Processes-**<br>➢ Define a strategic IT plan<br>➢ Define the Information Architecture<br>➢ Determine technology direction<br>➢ Define IT organisation and relationships<br>➢ Manage IT investment<br>➢ Communication management<br>➢ Manage Human Resources<br>➢ Compliance management<br>➢ Assess risks<br>➢ Manage projects<br>➢ Manage quality | **Sub System - Setting Strategic Direction**<br>➢ 'Integration of IT Strategy with Business Strategy' processes within this sub-system include the definition of an IT plan which is aligned with the business and also that an information architecture is in place. The IT plan and architecture ensure that the technology direction is determined for Royal Mail<br><br>**Sub System - IT Service Management and Delivery**<br>➢ 'Effective Communications' processes ensure that effective and efficient communications processes are in place between Royal Mail and the IT service provider<br>➢ 'Commercial Interface Processes' have significant links with the COBIT ' Manage IT Investment' processes<br><br>**Sub System - Compliance Monitoring**<br>➢ 'Compliance Monitoring Processes' are in place to ensure compliance management with for example IT policies and standards<br>**Sub System - Audit and Risk Management**<br>➢ 'Risk Management' ensures that in COBIT terminology risks are assessed<br><br>**Sub System - IT Change Management**<br>➢ 'Project and Programme Management' processes ensure via using the PRINCE 2 methodology that project are effectively managed<br><br>**Note 1** - The COBIT ' Define IT Organisation and Relationships' are defined by the IT Governance Relationship Framework |

| | |
|---|---|
| | **Note 2** - The COBIT 'Manage Human Resource', in the context of IT outsourced resource is a process which has been outsourced to the IT service provider. The COBIT 'Manage Quality' processes, in the context of the IT outsourcing service delivery, have also been outsourced to the IT service provider. Quality standards have however been set by Royal Mail for the IT service provider to operate within |
| **Domain 2 - Acquisition and Implementation**<br><br>**Sub Processes-**<br>➢ Identify automated solutions<br>➢ Acquire and maintain software<br>➢ Acquire and maintain technology infrastructure<br>➢ Develop and maintain procedures<br>➢ Install and accredit systems<br>➢ Manage changes | **Sub System - IT Service Management and Delivery**<br>➢ 'IT Service Management' processed based on the ITIL methodology are in place to ensure procedures are developed and maintained<br><br>**Sub System - IT Change Management**<br>➢ 'IT Service and Contract Improvement and Change' processes ensure that IT changes are managed effectively and efficiently<br><br>**Note 3** - The following COBIT process responsibilities have been outsourced to the IT service provider:<br>➢ Identify automated solutions<br>➢ Acquire and maintain software<br>➢ Acquire and maintain technology infrastructure<br>➢ Install and accredit systems |
| **Domain 3 – Delivery and Support**<br><br>**Sub Processes-**<br>➢ Define and manage service levels<br>➢ Manage third party services<br>➢ Manage performance and capacity<br>➢ Ensure continuous service<br>➢ Ensure system security<br>➢ Identify and allocate costs<br>➢ Educate and train users<br>➢ Assist and advise customers<br>➢ Manage problems and incidents<br>➢ Manage data<br>➢ Manage facilities<br>➢ Manage operations | **Sub System – IT Service Management and Delivery**<br>➢ 'IT Service Management' processed based on the ITIL methodology are in place to ensure performance and capacity management<br>➢ 'Commercial Interface Processes' ensure that costs are identified and allocated<br><br>**Note 4** – The following COBIT process responsibilities have been outsourced to the IT service provider:<br>➢ Manage third party services<br>➢ Ensure continuous service<br>➢ Ensure system security ( however Royal Mail has set the system security policy to be operated within)<br>➢ Educate and train users ( the users being Royal mail staff)<br>➢ Assist and advise customers ( the customers being Royal Mail staff)<br>➢ Manage problems and incidents<br>➢ Manage data ( however Royal Mail has set the data management policy to be operated within)<br>➢ Manage facilities<br>➢ Manage operations |
| **Domain 4 – Monitoring**<br><br>**Sub Processes-**<br>➢ Monitor the processes | **Sub System – Compliance Monitoring**<br>➢ 'Compliance Monitoring Processes' ensure that processes are monitored and that internal control adequacy is assessed |

| | |
|---|---|
| ➢ Assess internal control adequacy<br>➢ Obtain independent assurance<br>➢ Provide for independent audit | **Sub System – Audit and Risk Management**<br>➢ 'Right and Access to Audit' provides for independent assurance and audit |
| **2.0 VAL-IT Framework Domains** | **Comparison of VAL-IT with IT Governance Framework Sub- Systems** |
| **Domain 1 – Value Governance**<br><br>**Sub Processes-**<br>➢ Informed and committed leadership<br>➢ Define and implement processes<br>➢ Define portfolio characteristics<br>➢ Align and integrate value and financial management<br>➢ Establish effective governance monitoring<br>➢ Continuously improve value management | **Sub System - Setting Strategic Direction**<br>➢ 'Organisational Accountabilities and Responsibilities' assist with facilitating informed and committed leadership<br><br>**Sub System – IT Service Management and Delivery**<br>➢ 'IT Service Management' processed based on the ITIL methodology are in place to ensure IT processes are defined and implemented<br><br>**Sub System - IT Change Management**<br>➢ 'Project and Programme Management' processes ensure via using the PRINCE 2 methodology that project portfolio characteristics are defined<br><br>**Sub System - Benefits Management**<br>➢ Both the 'IT Balanced Scorecard' and 'Strategic Contract Annual Review' processes in place ensure that value and financial practices are in place and that continued improvement of value management (my terminology is benefits management) is addressed<br><br>**Note 5** - The overall IT Governance Framework ensures in VAL-IT terminology that effective governance monitoring is established |
| **Domain 2 - Portfolio Management**<br><br>**Sub Processes-**<br>➢ Establish strategic direction<br>➢ Determine availability and sources of funds<br>➢ Manage availability of human resources<br>➢ Evaluate and select programmes to fund<br>➢ Monitor and report on investment performance<br>➢ Optimise investment portfolio performance | **Sub System - Setting Strategic Direction**<br>➢ 'Integration of IT Strategy with Business Strategy' processes ensures that strategic directions is established (this aligned with business objectives and goals)<br><br>**Sub System - IT Service Management and Delivery**<br>➢ 'Commercial Interface Processes' ensure availability of sources of funds<br><br>**Sub System - IT Change Management**<br>➢ 'Project and Programme Management ' processes assist with the evaluation and selection of programmes to fund<br><br>**Sub System - Benefits Management**<br>➢ Both the 'IT Balanced Scorecard' and 'Strategic Contract Annual Review' processes in place assist with monitoring and reporting on investment performance and Optimising the overall portfolio performance ( the |

| | |
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| | portfolio in Royal Mail context being the outsourced IT service and projects / programmes)<br><br>**Note 6** - The following VAL-IT process responsibilities have been outsourced to the IT service provider:<br>➢ Manage availability of human resources |
| **Domain 3 - Investment Management**<br><br>**Sub Processes-**<br>➢ Develop and evaluate programme business case<br>➢ Understand programme implementation options<br>➢ Develop the programme plan<br>➢ Develop the detailed programme business case<br>➢ Launch and manage the programme<br>➢ Update the business case<br>➢ Monitor and report on the programme<br>➢ Retire the programme<br>➢ Develop IT lifecycle costs and benefits<br>➢ Update operational IT portfolios | **Sub System - Project and Programme Management**<br>➢ 'Project and Programme Management' processes based on the PRINCE 2 methodology deal with the end to end project / programme lifecycle. In VAL-IT terms this addresses the responsibilities of business case ( development, evaluation, implementation options, launch, management and monitoring of the programme and finally retirement of the programme)<br>**Sub System - IT Service Management and Delivery**<br>➢ 'Commercial Interface Processes' ensure that the IT service provider develops IT lifecycle costs and benefits (within the guidelines set by Royal Mail)<br><br>**Note 7** - The following VAL-IT process responsibilities have been outsourced to the IT service provider:<br>➢ Update operational IT portfolios |

Table 8.2 highlights some key differences between the IT Governance Framework and VAL-IT frameworks and is also useful to reflect further on why the IT Governance framework was designed and applied for this research programme. The key differences and areas of reflection in support of the use of the IT Governance Framework are as follows:

- As stated previously, the IT Governance Framework was designed and applied within the Royal Mail IT outsourced environment well in advance of the VAL-IT framework. It is argued therefore; that the IT Governance Framework demonstrated considerable foresight in addressing many of the areas that VAL-IT went on to detail. For example the need to establish effective governance monitoring, align strategic direction, put in place a robust

project/programme management methodology and have in place processes which address, portfolio, value and investment management (my terminology is 'benefits' rather than value or investment management) all key components of the IT Governance and VAL-IT frameworks

- Table 8.2 details, the IT Governance Framework spans the processes of both the COBIT and VAL-IT Frameworks. This has ensured that a 'specific' and holistic framework has been produced to address the IT outsourcing phenomenon. This is an alternative to the COBIT and VAL-IT Frameworks which are more 'generic' IT control / governance frameworks

- Table 8.2 also details some specific processes which have been outsourced to the IT service provider. This provides new information on what might constitute the 'boundaries' between and organisation and their IT outsourced service provider. It is argued that by addressing these boundaries then not only has a specific IT outsourced governance framework emerged but also an easier to understand and less bureaucratic framework has been developed. Note that as detailed earlier the key reasoning why COBIT had not been widely adopted by organisations was that it was overly complex and bureaucratic in nature ( Ridley, Young and Carroll (2004))

- It is interesting to note that there is no specific mention of the IT Governance Framework processes which detail the IT balanced scorecard approach, Strategic Annual Review, Skills and Professionalism, Common Objectives Based on Shared Risk / Reward and Joint IT Innovation and Exploitation. This may support the fact that an original and 'leading edge' framework has been produced for IT outsourcing

- All the frameworks recognise the imperative as stated by Colbert and Bowen (1996) to ***'ensure alignment between IT and its business goals'.*** They recognise that without knowing where the business is going it is impossible to align IT with an organisations business strategy and drivers

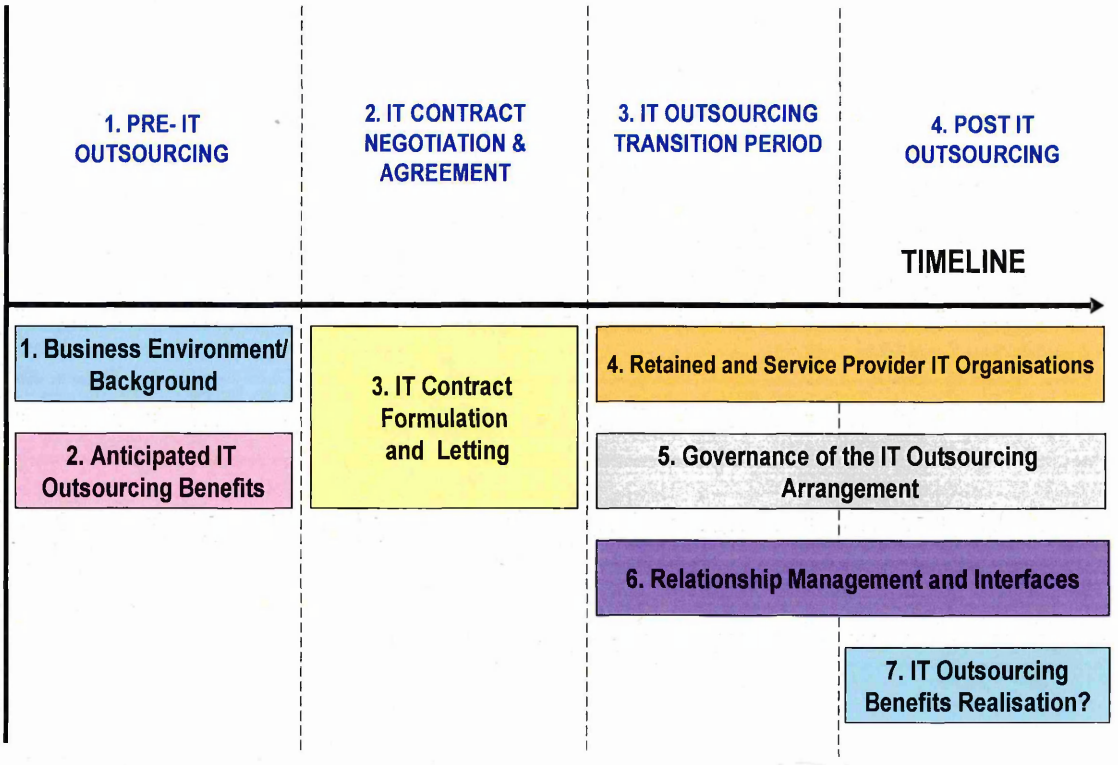
- A common theme in the IT Governance, COBIT and VAL-IT frameworks is the need to introduce a high level of ***'control'*** over the IT / IT outsourced environment. The issue of control (or lack of control) was apparent from the case studies undertaken however it was not deemed an issue for Royal Mail as a result of the application of the IT Governance Framework within their IT outsourced environment

- The IT Governance Framework was designed within the context of systems methodology and applied within the context of an action research programme. This unique approach differs from the approaches adopted by the COBIT and VAL-IT frameworks which have largely provided guidance on governance processes and practices. To enforce this point, Van Grembergen (2004), stated that COBIT tells us ***'what'*** needs to be done rather than ***'how'***. It is argued that the practical nature of the IT Governance Framework processes and relationships that have been applied and subsequently adopted within the Royal Mail IT outsourced environment have addressed the ***'how'*** issue to which Van Grembergen refers

### 8.2.6 Research Programme Covering the 'End to End' IT Outsourcing Lifecycle

This research programme has taken place over a period of 7 years and has therefore studied the full extent of the IT Outsourcing Lifecycle. This lifecycle is summarised in the 4 lifecycle stages figure, developed as part of this research programme:

**Figure 8.5 - The IT Outsourcing Lifecycle**




This research programme has covered the full extent of the IT outsourcing lifecycle and therefore it has provided an invaluable opportunity to test the early pre-IT outsourcing research thinking and proposals within a post IT outsourcing, ***'real world'***, practical IT outsourcing environment.

## 8.3 Contribution to Practice

The areas of this research programme that represent a contribution to practice are summarised in the paragraphs that follow:

### 8.3.1 IT Governance Framework – 'A Practical Toolkit'

The IT Governance framework has been adopted by Royal Mail and serves as 'A Practical Toolkit' within the context of its IT outsourced environment. On reflection it is useful to examine how the IT Governance Framework might be wider applied within other organisations.

To address this issue of wider applicability, the following table was constructed which examines the IT outsourcing problem areas arising from the five organisational case studies carried out and also provides a view on how the IT Governance Framework might have assisted:

**Table 8.3 - The Five Case Studies - How the IT Governance Framework Might Have Assisted**

| The Five Case Studies - Problem Areas | How the IT Governance Framework Might Have Assisted |
|---|---|
| ➢ Poor knowledge transfer | The case study organisations may have had an over reliance on external consultants who had prepared the IT outsourcing contract schedules and processes. The fact that Royal Mail largely used their own staff to develop and apply the IT outsourcing schedules and processes largely negated the issue on poor knowledge transfer |
| ➢ Unclear organisational interfaces | The IT outsourcing governance relationship model developed, applied and adopted within Royal Mail provides a model for organisational interfaces. This model may have been of use to the case study organisations who had difficulty in defining and implementing their own organisational interfaces |

| | |
|---|---|
| ➢ Loss of control | The IT Governance Framework was developed, using 'Systems Thinking', as a 'Model of control'. It was interesting to note that ***'loss of control'*** was not cited as an issue for Royal Mail. Therefore the case study organisations may have benefitted from using some of the controlling concepts arising from Royal Mail's positive experience of the development and application of this model to address their own control (or lack of control) issues |
| ➢ Inadequate performance metrics | Royal Mail had learned from the experience of the case study organisations who had not taken any performance metrics before entering into their respective IT outsourcing arrangement. The fact that Royal Mail undertook measures of performance (i.e. customer, financial) both before and after entering into their IT outsourcing arrangement ensured that a performance 'baseline' was taken and also that ongoing performance of the IT outsourced arrangement was embedded |
| ➢ Inadequate governance | The IT Governance Framework developed, applied and adopted as part of this research programme I believe would have been of use to the case study organisations that all cited problems with their governance arrangements. The IT Governance Framework provides a 'systemic' approach to defining and implementing key governance processes within an IT outsourced environment, this differs from the governance approaches undertaken by the case study organisations which were self-confessed as being largely ineffective |
| ➢ Poor benefits realisation | The majority of Royal Mail IT outsourcing benefits were realised (in the areas of Strategic and Organisational, Technical, Political and Economic). This was not the case with the case study organisations, therefore they may have benefited from the approach undertaken by Royal Mail. Also the IT balanced Scorecard approach adopted as part of this research programme ensured that ongoing benefits realisation was embedded and those benefits are continually measured. The external case study organisations did not measure benefits on an ongoing basis but may benefit from this practice successfully adopted by Royal Mail |

| | |
|---|---|
| ➢ Lack of trust | The year 1 relationship review highlighted that the Royal Mail IT outsourced arrangement was just falling short of being what is termed a '***Trusted Relationship***' ( Gartner 2002). The next planning stage of the Royal Mail 'planning cycle' will focus on putting in place mechanisms to move the relationship to one which is regarded as ***'trusted'***<br>The case study organisations may have benefited from adopting some of the relationship approaches adopted by Royal Mail in this area to address their own cited lack of trust issues with their respective IT service providers |
| ➢ Lack of commitment to innovation | In common with the case study organisations Royal Mail found that their IT service provider's commitment to innovation and technology exploitation had been poor. The second 'planning cycle' in Royal Mail is putting in place measures to attempt to address this issue as the relationship matures. Again the case study organisations may benefit from some of the thinking in this area to address their own issues with respect to gaining their IT service providers commitment to innovation |

Table 8.3 highlights that Royal Mail may have benefited from the 'lessons learned', or put differently 'mistakes made', by the case study organisations. The governance arrangements put in place by Royal Mail has ensured that the majority of problem areas stated by the case study organisations were not evident within Royal Mail.

It is my belief that because the IT Governance Framework has addressed the 'generic' issues arising from IT outsourcing (i.e. poor benefits realisation, inadequate control, lack of trust etc) then it may have wider applicability, within the context of IT outsourcing, to organisations outside of Royal Mail. This claim of course is untested as this research programme has focussed on the design and application of the IT Governance Framework within Royal Mail. However many of the design concepts used to construct the IT Governance Framework are very much 'generic' in nature , for example the use of control theory , balanced scorecard methodology, risk

management, compliance monitoring, and governance relationship construction,. Therefore my belief is that these 'generic' practices, ideas and concepts may have wider applicability outside of Royal Mail.

The IT Governance framework provides **'A Practical Toolkit'** to assist practitioners with the following:

- The controlling elements of the IT Governance Framework (namely setting Strategic Direction, IT Service Management and Delivery and IT Change Management) provide guidance to practitioners on how to control the IT outsourcing environment. This addresses a key issue highlighted within the external research that organisations were experiencing significant problems in ***'controlling'*** their IT outsourcing environments

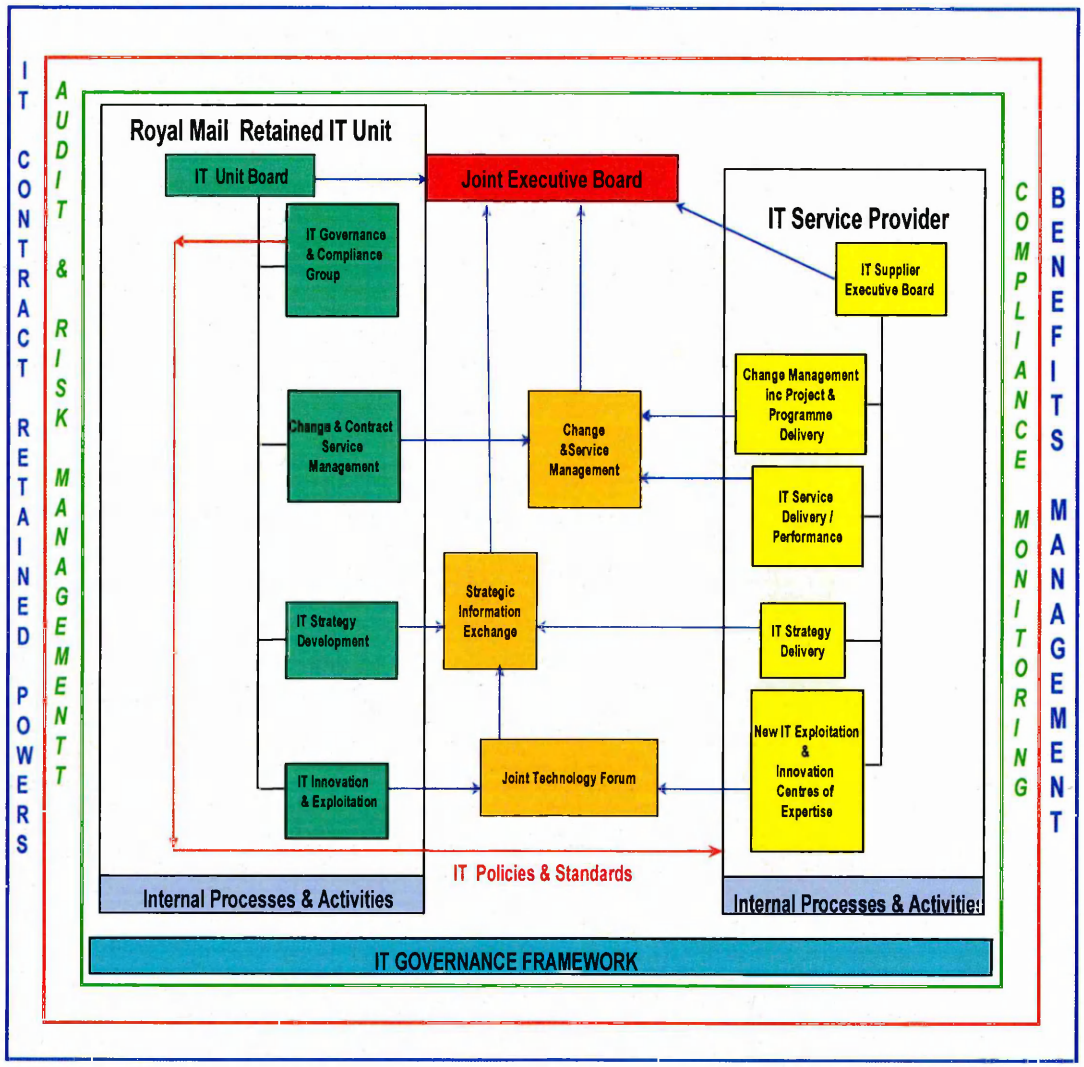
- The monitoring elements of the IT Governance Framework (namely Benefits Management, Compliance Monitoring and Audit and Risk Management) provide guidance to practitioners on how to monitor the IT outsourcing environment to ensure effective benefits realisation. Again the external research had highlighted that poor benefits realisation was found to be a key issue for organisations who had outsourced their IT capabilities

- The IT Governance Framework provides a framework, for use by practitioners, which details the systems and processes required to ensure effective alignment and integration between the customer and IT Service provider organisations. It also provides a framework which ensures that the highly contractual and commercial requirements of an IT Outsourced environment are considered

### 8.3.2 The IT Outsourcing Relationship Framework.

The IT Outsourcing Relationship Framework, detailed in the figure that follows, has been developed and applied as part of this research programme.

**Figure 8.6 - The IT Outsourcing Relationship Framework**




The IT outsourcing relationship framework provided details of the physical interfaces that were required to ***'bring to life'*** the IT Governance Framework processes and

systems within the ***'real world'*** Royal Mail IT outsourcing environment. These physical interfaces, through a number of management boards and forums, are intended to 'knit together' the retained IT unit within Royal Mail and the IT Service Provider organisations. Also, as previously detailed, each of these boards and forums has assigned responsibility for discharging the requirements of nominated elements of the IT Governance Framework systems and processes.

This area of the research programme, builds upon, and provides practitioners with an alternative view to the work of Lacity and Willcocks (2001) who identified the four faces of a retained post IT outsourcing IT Unit (namely , ***'The Business Face'*** , ***'The Technical Face'*** , ***'The Governance Face'*** and ***'The Supply Face'***).

The IT outsourcing relationship framework has provided practitioners with a unique and original framework that provides details of the following:

- The proposed structure of a retained IT Unit
- The proposed structure of an IT service provider organisation
- Details of how the retained and IT Service provider organisations should be physically integrated. This was achieved through the following boards and forums;
    - Joint Executive Board
    - Change and Service Management Board
    - Strategic Information Exchange
    - Joint Technology Forum

### 8.3.3 The IT Outsourcing Contract Principles

The eight IT outsourcing contract principles developed and applied as part of this research programme provide guidance to practitioners whose respective organisations may be considering an IT Outsourcing strategy. These principles are summarised in the table below:

**Table 8.4 - Summary of the IT Outsourcing Contract Principles**

| Summary of Contract Principles |
|---|
| *1.0 Agree the IT Governance Framework as part of the outsourcing negotiations* |
| *2.0 Embed a 'Shared Risk / Reward' philosophy* |
| *3.0 Retain the Right and Access to Audit* |
| *4.0 Measure IT performance metrics both before and after outsourcing* |
| *5.0 Gain commitment to innovation and technology exploitation* |
| *6.0 Define up front accountabilities and responsibilities* |
| *7.0 Contract Schedules to be constructed 'In House'* |
| *8.0 Have a contract exit management strategy* |

To summarise the effectiveness of the principles, the two problem areas (and areas for future development) were in the failure to embed a ***'Shared Risk / Reward' philosophy'*** and also to gain commitment to ***'Innovation and technology exploitation'.*** All the other contract principles have added value within the context of the IT outsourcing relationship.

### 8.3.4 The Research Methodology - Towards Mode 2

Action research has been utilised as the research method which has enabled the theoretically derived systems constructs and frameworks to be tested in a ***'real world'*** Royal Mail IT Outsourcing environment. The research methodology has therefore enabled a unique linkage to be created between both theoretical and practitioner perspectives.

This research programme has progressed from the early literature reviews and analysis through to the next stages of designing and then applying theoretical frameworks and models within a practical environment. There has been a shift away from the traditional ***'Mode 1'*** form of research to a more recent concept of ***'Mode 2'*** research. MacLean, MacIntosh and Grant (2002) define ***'Mode 1'*** research as:

***'Problems set and solved in a context governed by the largely academic community'.***

They also define ***'Mode 2'*** research as ***'Research carried out in the context of application'***

The table that follows provides a summary of how the 5 Key features of Mode 2 Research have been forthcoming throughout the course of this research programme:

**Table 8.5 - Mode 2 Research and the Features of the Research Programme**

| **Mode 2 Research Key Features ( Maclean , McIntosh, Grant 2002)** | **Mode 2 : Key Features of this Research Programme** |
|---|---|
| **1.0 Knowledge produced in the context of application** | The research proposals have been ***'applied'*** with the Royal Mail IT outsourcing environment.<br><br>The imperative as defined by MacLean, MacIntosh and Grant (2002) that the research should be ***'practically useful'*** has been met as confirmed by practitioners within Royal Mail. The action research process ensured that the research programme concepts and frameworks were ***'produced under an aspect of continuous negotiation'*** Gibbons et al (1994) |

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| **2.0 Transdisciplinary** | Transdisciplinary problem solving involves the integration of different skills in a ***'framework of action'***. (Gibbons et al (1994)).<br><br>Through this research programmes action research process (and Systems Thinking Process) a framework has been provided which has, through bringing together a disparate skills and knowledge base, enabled theoretical constructs to be developed and tested in a practical environment. Through this process a ***'framework of action'*** has emerged |
| **3.0 Heterogeneity and Organisational Diversity** | The role and make up of the Research Programme Team (constructed from members across all the Royal Mail Business Units) coupled with my own role as both academic and practitioner has ensured that a heterogeneous and organisationally diverse team has addressed the problematic nature of IT outsourcing.<br><br>The Research Programme Team has ensured that multi-faceted problems have been addressed throughout the research programme |
| **4.0 Social Accountability and Reflexivity** | The action research process (and specifically the role of the Research Programme Team) has ensured a high level of interaction with the user community. The reflexive nature of the action research process utilised throughout this research programme has also ensured that ***'emergent theory'*** (Eden and Huxham (1996)) has been forthcoming.<br><br>The orderly and structured nature of the action research process has also ensured that this reflexive and 'emergent ***theory' has*** been harnessed. This is a point made by Eden and Huxham (1996):<br><br>***'A high degree of orderliness is required in reflecting about, and holding onto, the emerging research content of each episode of involvement in the organisation'*** |
| **5.0 Diverse range of Quality Controls** | ***'In Mode 1 research the quality of knowledge produced is primarily judged from the standpoint of the discipline, it's senior luminaries and peer evaluation processes'***<br>MacLean , ManIntosh and Grant ( 2002)<br><br>Although the objectives (in particular peer evaluation) of Mode 1 research is valid within the context of this research programme the research boundaries have been extended due to |

| | |
|---|---|
| | the socially constructed nature of the action research process. The research programme has attempted to satisfy a wide range of stakeholders from both the academic and practitioner communities.<br><br>Whilst accepting that by attempting to satisfy a broad and diverse audience there is a conceivable risk of continual compromise, I support the view of Gibbons et al (1994) who argued that:<br><br>***'It does not follow that because a wide range of expertise is brought to bear on a problem that it will necessarily be of a lower quality. It is of a more composite, multidimensional kind'*** |

## 8.4 A Critical Evaluation of the Research Programme

This chapter critically evaluates the following areas:

- ***Why is the research important and who cares?***
- ***What has been learned from my own practice and from this intervention and change?***
- ***What are the problems with and limitations of the research programme?***

### 8.4.1 Why is the research important and who cares?

**IT Outsourcing has a History of Failure**

Both practitioners and academics may ***'care'*** about IT outsourcing in that numerous studies have argued that IT Outsourcing has not provided organisations with their anticipated business benefits. Examples of these studies include the work of Gordon (1994), Grover, Cheon and Teng (1994), Willcocks, Fitzgerald and Lacity (1996),

Earl (1996), Farrell (1999) and McDowall (2001). Indeed the work of Gartner (2002) estimated that 80% of IT Outsourcing deals fail to deliver their original anticipated business objectives.

More recent examples of IT outsourcing failure is the recent decision by JP Morgan ( September 2005) to terminate their £5 Billion IT outsourcing deal with IBM and Sainsbury's decision to call time on their £1.7 Billion IT outsourcing contract with Accenture (November 2005). The decision by both these organisations to take their IT capability back in house has proved to be an extremely costly exercise, both financially and emotionally. Despite this apparent lack of IT outsourcing success this research programme has highlighted the conundrum in that there has been a rapid growth of the IT Outsourcing market.

This research programme has importance in that it seeks to provide some of the solutions to the problematic areas of IT outsourcing as well as identifying the drivers behind the continued growth of the IT outsourcing market.

**The External Relevance Problem**

Van Aken (2001) highlighted the issues associated with the ***'external relevance problem':***

***'Present academic research does not produce by and large valid research products. These are relevant, as they contribute to academic understanding of the world of management and organisation and to the academic debate and they enhance the position of the researchers in question in the academic reputation system. My problem is not with this internal relevance, but with its relevance outside academia'***

The previous sections have dealt with the relevance of this research programme from an academic perspective. However, because this research programme has implemented the theoretically or academically derived concepts and frameworks within a practical environment means that the ***'external relevance problem'*** and the ***'relevance outside academia'*** issues have been addressed.

I would therefore argue that the academic community would ***'care'*** about this research programme because it provides a theoretical insight into the systems derived concepts and frameworks. I would further argue that the audience outside the academic community, and specifically IT outsourcing / IT Governance practitioners, would 'care' because of the lessons that have been learned from implementing the research proposals within a ***'real world'*** practical environment.

### 8.4.2 Learning from my own practice and from this intervention and change

On reflection, the response to the question with respect to what **change** has taken place above lies in the following key areas:

- The change brought about by the intervention relating to the implementation of the IT Governance and IT Relationship frameworks has been that the Royal Mail retained IT Unit is now operating within a highly commercial and contractual environment. This is a significant move away from the previous internal IT market where the relationship had been non-commercial and non-contractual

- The need to work within highly commercial and contractual frameworks has brought about a change in behaviour of the staff in the Royal Mail retained IT unit who have, on the whole, made a transition from dealing with an internal IT supplier with transactions based on what were termed 'wooden dollars' to a relationship where real commercial and financial transactions were taking place an a day to day basis

My own **practice** during the course of this research programme has highlighted the following:

- The major difference with previous academic research I have carried out is that I have not had an opportunity to implement academic and theoretical frameworks within a practical or ***'real world'*** environment

- This research programme has provided me with the opportunity to implement my systems derived theoretical constructs and frameworks within the Royal Mail IT Outsourced environment. The fact that this practice has taken place has created a significant sense of ownership and indeed accountability for the new practices which have been brought about by the implementation of the IT Governance and Relationship Frameworks

- The external research and literature review carried out as part of this research programme has highlighted that IT outsourcing is an extremely problematic area. It is expected that adopting my practice will go some way to addressing some of these issues and concerns which have been highlighted previously

- My practice during the course of this research programme has enabled the fusion of both the theoretical and practitioner aspects of the IT outsourcing phenomenon.

### 8.4.3 What were the problems with, and limitations of, the research programme?

On reflection the problems with, and limitations of, the research programme are in the following areas:

- The dual role of both academic and practitioner that I have performed throughout the course of this research programme has been a problem area that has needed to be addressed. In my practitioner role as Royal Mail Head of Governance I had my own agenda in that I was tasked with providing practical solutions and interventions into the IT Outsourcing environment. My role as academic was also to ensure that theory and concepts developed would be able to stand the rigours and tests of academia and therefore represent a robust theoretical contribution to knowledge. My belief is that I have managed to clear these practitioner and academic ***'double hurdles'*** which Pettigrew (2001) described as ***'simultaneously delivering practitioner relevance and scholarly excellence'***

- The IT Governance Framework has been developed and implemented from a customer (rather than supplier) perspective. Because this approach has been taken then it could be argued that the IT Governance Framework may be better for the customer than the supplier. This is relevant to the work of Beulen (2004), Ackerman (2002), Van Der Zee and Van Wijngaarden (1999) and Morgan Chambers (2001) who's definition of ***'successful'*** IT Governance was:

  ***'The realisation of prior set objectives by <u>both</u> the outsourcing organisation as well as the IT Supplier'***

  This issue is linked to the achievement of ***'mutual benefit'*** within a customer and supplier IT outsourcing relationship which was described by Lee (2003):

***'<u>Mutual benefit</u> is the most important predictor for reaping maximum benefit from outsourcing in terms of both user and business satisfaction'***

Because this research programme has been led from a customer perspective then a potential problem area may be that it could be argued that ***'mutual benefit'*** may not have always been at the forefront of the research process

- This research programme has had significant focus on designing and applying governance and relationship processes within the Royal Mail business environment. It may be argued that the design and application may have been different for other organisations which are, for example, of differing sizes and scale to Royal Mail and operate in different sectors and business environments

# Chapter 9

# Conclusions and Future Research

## 9.1 The Thesis Conclusions - Have the Research Programme Objectives Been Achieved?

This research programme has objectives which are both **theoretical** and **practitioner** orientated.

Firstly from a **theoretical** perspective the unique combination of SSM and Action Research has addressed the problematic nature of IT outsourcing. This combination enabled an original ***'systems derived'*** IT Governance Framework to be developed. The use of action research coupled with systems ideas and thinking has provided useful assistance with being able to articulate (both to the practitioner and academic communities) an extremely complex research subject that IT outsourcing represents.

Further the utilisation of the action research and SSM methodologies has provided additional value in that it has assisted with enabling a structured approach to this research programme. This research approach has enabled original and leading edge theoretical constructs and frameworks to be developed with the end product of this research process being the implementation of an original **IT Governance Framework.**

The IT Governance Framework represents an original contribution to knowledge. It is anticipated that this framework will be of use to academics that have an interest in how to manage, **control** and **govern** an IT outsourcing environment. The framework provides an alternative to some of the more generic and mature IT control frameworks such as COBIT (Control Objectives for IT).

The IT Governance Framework provides an original and specific framework which has been designed and applied to address the highly complex, dynamic and specialised IT Outsourcing environment. Also, the IT Governance Framework represents an original ***'model of control'*** which has been applied within the Royal Mail IT outsourced environment.

The research programme has studied IT outsourcing within the wider context of organisational behaviour. This has provided further insights into organisational

behaviour relating to IT outsourcing which has been positioned within an organisation's desire to create a more ***'flexible'*** Streeck (1987), Mary Jo Hatch (1997) structure which Streeck (1987) described as increasing the ***'general capacity to re-organise in close response to fluctuations in their environment'.***

IT outsourcing has also been positioned within the ***'core'*** controlling the ***'periphery'*** debate (Nichols (1986) and Prowse (1990)) where it was argued that in order to move towards a more ***'flexible'*** organisation there is an increasing trend to outsource IT which may have once been regarded as critical to an organisation (Lacity and Willcocks (2001) termed this a ***'critical differentiator'***). Through this change in organisational behaviour it is argued that a new model for IT sourcing has emerged, namely a move from in sourcing to outsourcing.

From a **practitioner** perspective the IT Governance Framework was practically applied within the Royal Mail IT outsourcing environment. This practical intervention provided a unique opportunity to underpin my research programme actions in practice as well as to 'bridge the gap' between theoretical / academic and practitioner perspectives. This practical intervention enabled the theoretically derived frameworks and constructs within what systems thinking would term a ***'real world'*** practical Royal Mail IT outsourced environment.

Within my role as Royal Mail Head of Governance I had practitioner orientated reasons for ensuring my employer obtained maximum benefit, through effective IT Governance, from its IT Outsourcing arrangement. Also the fact that Royal Mail has entered into one of the largest IT outsourcing deals in Europe (£1.5 Billion over 10 years) should prove to be of interest to practitioners within other organisations who have outsourced their IT capability or are considering an IT outsourcing strategy.

The Royal Mail / IT service provider physical relationships and interfaces were also applied within a ***'real world'*** environment. This enabled the IT Governance Framework systems and processes to be 'brought to life' within the context of the Royal Mail IT outsourcing environment. Also the IT outsourcing contract principles

which were developed and applied provide a view of best practice contract principles for critique and use by practitioners.

Also from a practical perspective this research programme adds to the new breed of ***'Mode 2'*** research programmes where:

***'Research is carried out in the context of application'***
MacLean, MacIntosh and Grant (2002)

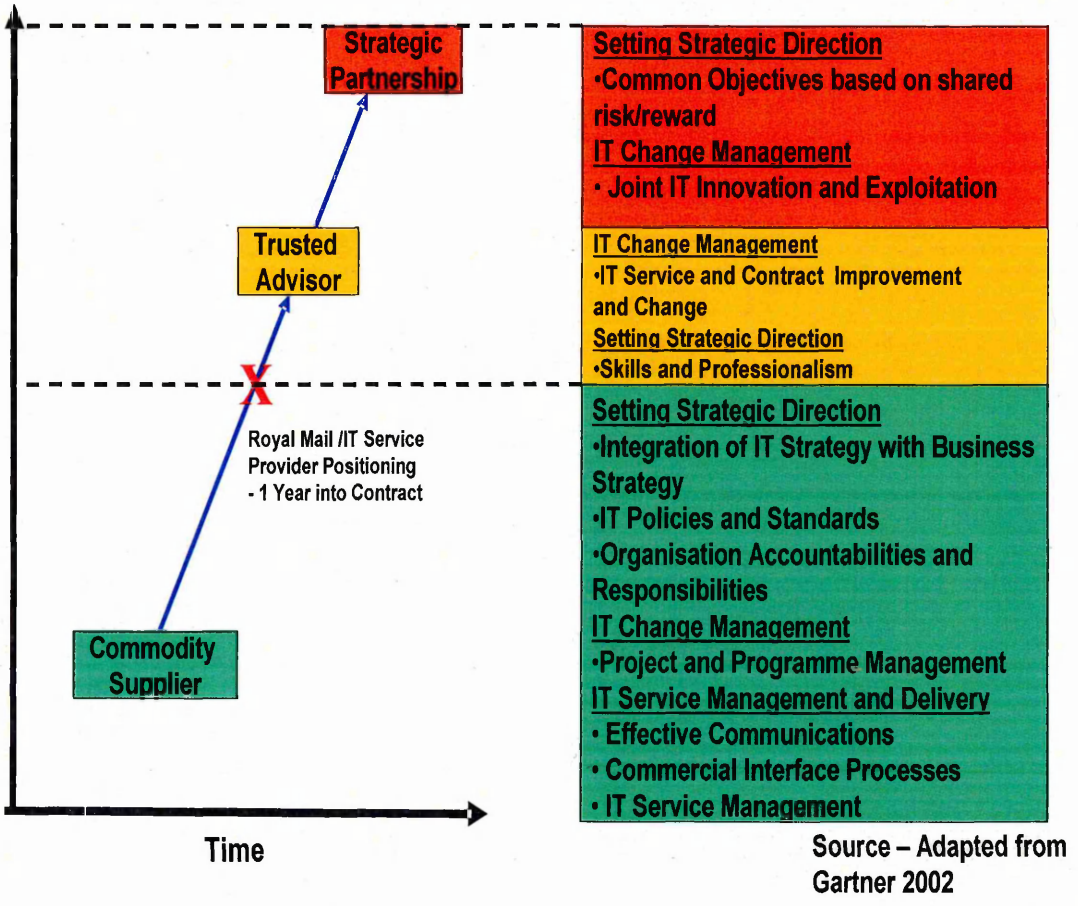
This research programme has addressed both the theoretical and practitioner objectives in what is an increasingly important area of study. This point is confirmed by Bell and Dallas (2004):

***'In an era of cost constraints, market turbulence and organisational stress, the role of IT governance has never been more critical'***

### 9.2 Future Research and Direction

The maturity positioning of the Royal Mail IT outsourcing relationship and IT Governance Framework systems and processes have been highlighted previously and are summarised in the figure that follows:

**Figure 9.1 - Royal Mail Positioning Using the Gartner IT Outsourcing Relationship Model**




Source – Adapted from Gartner 2002

It is suggested that future research and direction, or in action research terminology the second cycle of action research, or second ***'Spiral'*** (Zuber-Skeritt (2001), should focus on identifying how Royal Mail (and indeed other organisations in a similar situation to Royal Mail) can move up the relationship maturity chain to what Gartner (2002) would describe as ***'Trusted Advisors'*** and ***'Strategic Partnerships'.*** The figure shows that there are four key areas that should form the basis of future work and

improvement to assist with moving up the maturity chain, namely, Skills and Professionalism, IT Service Contract Improvement and Change, Joint IT Innovation and Exploitation and Common Objectives based on shared risk / reward.

The future work on moving to the position of ***'Trusted Advisor'*** may relate to the work of Beulin (2004), Apte (1990), Lacity and Hirschheim (1993), Willcocks and Fitzgerald (1994) and Earl (1996) who all argued that ***'mutual trust'*** is an important factor within a customer/IT supplier relationship. Similarly, future work on moving to the more advanced or mature, relationship of ***'Strategic Partnership'*** may involve addressing some of the ***'cultural issues'*** which may arise as a result of the convergence of customer and IT supplier organisations. This relates to the work of Aylott (2002), Kern and Willcocks (2000) and Beulen and Ribbers (2002) who all argued that cultural issues and convergence represent a potential barrier to successful IT outsourcing relationships.

A further suggestion for future work would be to ascertain the potential on how generalisable the IT Governance Framework, or practices, ideas and concepts of the IT Governance Framework, might be both within the context of other IT outsourced environments outside of Royal Mail or alternatively non IT environments such as engineering or manufacturing services. Although the framework has been designed to address the specific problems associated with an IT outsourced environment for application within Royal Mail it would be interesting to research and ascertain if some of the 'generic' systems and processes could be adapted to form a more general model of control within other complex outsourced (or indeed in sourced) environments. An approach to testing the generalisability of the IT Governance Framework might be to carry out a similar systems and action approach to which this research programme adopted within a different market sector or functional / operational area environment.

A final suggestion for future work would be to carry out a follow up review of the effectiveness of the IT Governance Framework. This research programme has carried out an in depth review 1 year after the framework was implemented, however, it would be interesting to find out how the IT Governance Framework has withstood the test of time.

# Appendix A

## Summary of Output from Interview Sessions with the Research Organisation

**Question Area 1**

**Business Environment / Background**

Can you please explain the background and rationale surrounding the decision to outsource IT capability:

- Business environment and competition
- Business, strategic and operational drivers
- Motivation and stakeholder / shareholder agendas for IT outsourcing

**Key Research Findings**

- **The Business Environment**:- The business environment and drivers surrounding the decision to outsource IT is summarised as follows;
  - All the private sector organisations were operating in **highly competitive commercial environments** and were experiencing difficulty in achieving historical levels of performance ( both financial and operational)
  - The public sector organisations were faced with a climate of **reduced budgetary allocations and spending caps** (including reduced spend on IT)

- Although the organisations were found to be aware of the potential risks or **'History of Failure'** associated with IT outsourcing the generic stakeholder and shareholder view was that these risks were outweighed by the potential benefits. ( Note - Examples of history of failure cited during the interviews was the interviewees awareness of the work of Gartner 2002 and Socitm 2001 which outlined poor benefits associated with IT Outsourcing, the organisations were also aware of some of the high profile IT outsourcing failures such as Enron and Xerox)

- **Selling the IT Outsourcing Benefits:** All the organisations sought independent advice from external consultants and were advised that **significant cost savings could be achieved by outsourcing IT** capability (estimates ranged between 10 and 20% potential savings on IT spend per annum). However, with the lengthy and complex nature of IT outsourcing it was mentioned during some of the interviews that the consultants had much to gain by continued engagement working on the IT outsourcing process.

- **Stakeholder Agendas;** Some of the key business, strategic and operational drivers and therefore **'Stakeholder Agendas'** towards IT outsourcing were:

  - **IT was regarded as 'non core'** to the business and was therefore deemed a legitimate outsourcing product. Some of the organisations had already outsourced other non-core products and services such as building maintenance, security and catering

  - The overall business strategy was towards **downsizing** and IT outsourcing was deemed as being a ***'strategic fit'***

  - Perceptions existed within the organisations that **IT costs were too high** (Note - no evidence or benchmarking data was supplied to support this claim) and that IT outsourcing would realise lower costs whilst bringing a welcome cash injection into the business (i.e. from the potential sale of IT assets)

  - Some views were that IT outsourcing ***'would create a strategic alliance or partnership'*** with a global specialist IT supplier. It was claimed that this would assist with creating a platform to further exploit new technology and identify and deploy innovation opportunities

**Question Area 2**

**Anticipated IT Outsourcing Benefits**

What were the anticipated benefits of IT outsourcing?

As a checklist, some examples of anticipated benefits cited in outsourcing literature may include;

- Cost savings / potential cash injection
- Improved quality of IT service
- Increased operational efficiency and flexibility
- Others (please specify)

**Key Research Findings**

- All but one of the organisations cited a **reduction in IT costs** as being a key motivator for outsourcing IT capability. The exception being the organisation that wished to 'pass on' redundancy liability for the IT staff who would be transferred to the IT service provider

    - The move from a **fixed to variable cast base** was also deemed to be attractive by the key stake and shareholders within the organisations. Creating a more variable cost base was deemed to be an opportunity to create more flexibility within the organisation and pass on any risks associated with peaks and troughs in IT demand

    - A view was that there was potential to **sell off some IT assets** as part of the IT outsourcing agreement. This may result in a cash injection to the business which within the context of the current commercial environments was seen to be an attractive opportunity

- The organisations shared the view that the use of a specialist IT service provider would act as a lever to **improve key IT enabled business processes** (i.e. Human Resource Management and Finance processes), **enhance IT service quality** and **operational efficiency.** Current IT service quality was deemed to be low - although no quality / benchmarking criteria was provided to support this claim

- Some of the organisations viewed that a potential benefit of IT outsourcing may be an opportunity to share or **offload some of the risks associated with IT delivery**. Many organisations cited failed IT projects / programmes and they felt that passing this responsibility to an external service provider would discharge some of the associated IT risks

- Also the access to a **highly skilled external pool of IT expertise** was viewed to be an attractive proposition. In particular with respect to the access to central pools of IT experts which would potentially be able to **identify technology exploitation and innovation opportunities.** This was viewed to be particularly evident if the IT outsourcing supplier was a large global player with both IT and business capability

- As previously stated in Question 1, IT was regarded as **'non- core'**. The view was that by outsourcing this non-core activity more focus could be provided on core / business critical products and services

**Question Area 3**

**IT Contract Formulation and Letting**

Please explain the rationale for the decision to let the contract to the preferred supplier along with the specifics and structure of the IT Outsourcing contract.
These could include:

- What was the basis for the decision to let the contract to the chosen supplier (i.e. Financial, operational, quality, cash injection etc)
- Scope of contract (i.e. Total Outsource or selective outsourcing)
- Size of contract - Annual value, duration, number of staff affected
- What are the contract pricing mechanisms? (i.e. Fixed price, variable price)
- Do you have any incentives and penalties within the contract?
- What is the provision for major contract change, review and re-negotiation?
- Do you have a contract exit management strategy?

**Key Research Findings**

- **General criteria for formulating and letting the IT contract** were based on broad criteria. An example of this broad criteria is the application of critical success criteria as defined by Kaplan and Norton (1996). This is used industry wide and consists of the following criteria:

  - **Customer** - e.g. - Company with a presence in our target market
  - **Process** - e.g. Service standard at least equal to current standard
  - **Financial** - e.g. Cost at least equal to our current level
  - **Growth** - Will support our business goals in new markets
  - **Learning** - Will provide advice and guidance in markets

- **Specific drivers for formulating and letting the IT contract** to the chosen supplier were primarily **financially motivated** (primarily lowest overall prices for products and services and also cash injection incentives from sale of assets). There were however a number of other key incentives and decision making criteria identified as follows:

  - **Financial history and stability** of the potential IT service provider was a criteria which all the organisations cited

  - **Proven track record** of success in the management of IT outsourcing arrangements of the respective scale and complexity that faced the specific organisations was an important factor

  - Some of the decision-making criteria were around Human Resources management. For example the service providers were asked to provide details with respect to **how the transferring IT personnel would be**

**managed** (including how they would be trained and provided with appropriate development opportunities). Also the loss of redundancy liability was a prime motivator identified for one of the organisations

- The approach to how the IT outsourcing relationship would be managed was a key consideration. Some organisations stated a wish to operate ***'within a spirit of partnership*** ' rather than operate within a rigid customer / supplier framework

- Other considerations included the IT service providers approach to **technology exploitation and innovation** and also how service and product improvement initiatives would be identified and deployed

- In order to provide clarification of the **scale and complexity of the IT outsourcing arrangements** some of the key statistics and findings with respect to the IT outsourcing arrangements are as follows;

  - The contract duration periods ranged from **5 to 10 year periods**. Some of the contracts had built in provision for extension based on achievement of set performance and operational criteria. Contract signature dates ranged from 1992 to 1999

  - IT outsourcing contracts ranged from **£25 Million to £120 Million** per annum with the total IT value being in the region of **£300 Million** per annum

  - The total number of people transferred from 'in house' to external IT service providers is in the **region of 2700**

  - Two of the organisations chose a **total or 'big bang'** IT outsourcing solution with the remaining three utilising a **selective** IT outsourcing arrangement

- The initial **IT contracts** contained clauses and processes, which were on the whole written by contract lawyers and external consultants. These were viewed by the respective organisations to be **overly complex and bureaucratic**

  - Over time the levels of IT **contract re-negotiation and change have increased** and for some of the organisations it has not been possible to keep to the lengthy and complex re-negotiation and contract change mechanism in place. What has evolved is a common sense approach to dealing with change, however, as one of the interviewees stated ***'failure to deal adequately with change requirements within a dynamic environment has assisted with losing sight of the original contract objectives'***

- **Contract Pricing mechanisms** primarily consisted of a combination of **fixed price** products (i.e. replacement PC'c and printers) and **banded pricing schedules** which were utilised where demand was expected to be variable (i.e. mainframe and server capacity)

➢ The following, what were deemed, ***'Best Practice'***, **Contract Principles** were identified ( Note that some of these principles were based on hindsight):

- In hindsight the organisations would have agreed up front and as part of the contract negotiations the exact details of an **IT Governance / controlling framework**

- Some of the contracts had built in provision for **service and product related incentives and penalties**. The incentives were primarily based around service and product improvement initiatives where some of the organisations adopted a **shared risk / reward philosophy**. For example, if a new IT product could potentially achieve 20% savings on current operational costs, the savings or **rewards** would be shared between the customer and IT service provider. Alternatively, if the new product failed to deliver any operational savings then the customer and IT service provider would share the **risk** or cost element associated with the failed initiative. Where adopted this shared risk / reward philosophy had proven to be a success

- Retaining the **'right and access to audit'** within the IT service provider organisation has proved to be an extremely valuable mechanism

- Again in hindsight, it would have been extremely valuable to have **measured IT performance metrics** both **before** and **after** IT outsourcing. This would have enabled an accurate baseline to be achieved

- Commitment to innovation and technology exploitation has been poor. Therefore a recommendation would be to **gain commitment to innovation and technology exploitation** as part of the contract negotiations

- There has been confusion with respect to accountabilities and responsibilities between the customer and IT service provider organisations. A future learning point would be to ensure that the **accountabilities and responsibilities are discussed and agreed as part of the contract negotiations**

- Using ' **in house staff'** ( supported by external consultants and contract lawyers etc) **to construct contract schedules** will assist with preventing any knowledge transfer issues and create a sense of ownership

- The majority of the organisations had entered into the IT Outsourcing arrangement with some form of **contract exit management strategy** (indeed two of the organisations undertook this route and chose to reverse strategy and in source). All the organisations stated that to invoke the exit management strategy would be a costly exercise - ***'both financially and emotionally.***

**Question Area 4**

**Retained and Service Provider IT Organisations**

Please explain the structure of the retained IT organisation. In particular:

- Details of the retained IT organisation in terms of size, structure , scope and functions
- Rationale around formation of the retained IT organisation
- How effective and efficient is the retained IT organisation?
- Provide details of the IT service provider organisation
- How is new technology research and innovation provided (internally or externally and how successful is this?)

**Key Research Findings**

- The organisations retained IT functions consisted largely of a **central supplier performance and contract management group.** This group was responsible for the commercial and operational interface with the IT service provider and had a reporting line into a senior board or committee within the respective organisations. The performance and contract management groups deal with the 'day to day' management of IT Services

- The rationale around the retained IT organisations were that they should be able to administer the contractual arrangement laid out in the contract schedules and also monitor performance of the IT service provider. **The retained IT organisations were viewed as a overhead to the organisation and were formed on a 'lean and mean' philosophy**

  An extreme example is that one of the IT organisations retained only 6 IT personnel compared with the 1000 IT personnel who transferred to the IT service provider. However, it was noted that this organisation is now looking at increasing its retained IT capability, particularly in the areas of IT strategy / architecture development, implementation and assurance and also in the areas of IT change management and governance

- The IT service provider organisations which face off to the organisations IT function consisted typically of the following functional areas;

  - **Service delivery and performance management** – ensures that the 'day to day' IT service is managed

  - **Change management** – mainly comprising major service change and project and programme delivery

- **IT Strategy delivery** – ensures that an IT strategy is developed and deployed

- As stated previously a common theme is that the IT service provider's **commitment to innovation and technology exploitation has been poor**. There has been a significant focus by the IT service provider on driving value from existing products and services rather than putting forward future IT innovative solutions and exploitation opportunities along with the appropriate level of skills and professionalism to drive this innovation. The organisation interfaces did not facilitate effective technology innovation and exploitation

**Question Area 5**

**Governance of the IT Outsourcing Arrangement**

How do you govern, manage and control the IT outsourcing arrangement?

- Use of Governance or controlling framework(s)
- Obtain details of any key interface processes and models used
- What provision is in place (if any) for audit, risk management and compliance activities?
- Do the governance processes have any contractual reserved rights that can be enforced?

**Key Research Findings**

- Some of the organisations had put in place their own **governance processes** with the objective of providing some level of governance and control over the outsourcing contract. There was **no consistent format to these governance processes** however the broad principles were based around a very simple management control systems which consisted of:

  - **Setting Direction** - By for example formulating an IT strategy which provides future direction to the IT service provider

  - **Managing Direction** - This is the 'day to day' to management of and interface with the IT service provider

  - **Changing Direction** - This deals with changes required to the IT service provision. Changes could be driven, for example, by new projects and programmes or could be brought about by the implementation of new technology. A key change mechanism used by the organisations was by adopting a project and programme methodology (examples of methodologies used by organisations included Projects within a Controlled Environment ( PRINCE ) and the Information Systems Examination Board (ISEB) in project and programme management

- The organisations cited a **lack of control** over the IT outsourcing arrangement , the key reasons for this are as follows:

  - Only one of the organisations used a **formal 'industry standard' controlling or process framework**. This was based on the Control Objectives for Information Technology (COBIT), which was deemed

by the organisation to be **overly bureaucratic and expensive** to operate. Over time the COBIT principles (which were primarily used as an audit checklist) have been relaxed

- **Inadequate measurement and performance metrics** were taken by the organisations when the IT service was provided in house. The result of this is that the subsequent analysis of the potential benefits of IT outsourcing, for example in terms of IT costs, operational efficiency and quality of service, has been extremely difficult to measure and control

- **Poor knowledge transfer** has been an issue for many of the organisations. The issue being that external IT consultants and legal contract specialists have largely been responsible for formulation and negotiation of the IT service contract. Once these specialists have departed (typically after the IT outsourcing contract has been signed) the customer has been faced with difficulties in understanding and therefore managing the IT outsourcing contractual arrangements , particularly in the critical early stages of the IT outsourcing arrangement

- **The lack of clear accountabilities, responsibilities and decision making rights** between the customer and IT service provider organisation resulted in an inability to create a clear direction for the relationship to operate within. This also resulted in a level of confusion and duplication of effort between the customer and IT service provider organisations

- The following issues were present with respect to **audit, risk management and compliance activities** and interfaces between the respective organisations and their IT service providers;

  - As stated previously some of the organisations had specified within the contract that **they retained the right and access to audit** of the IT systems and processes (also this included financial audit) within the IT service provider's organisation. Although not used frequently this had proved an invaluable facility particularly when major incidents and systems failure occurred. These audits could either be carried out by the customers own in house auditors or by a nominated specialist external audit company

  - Some of the organisations had assumed that **IT risks management would be the responsibility of the IT service provider** once the IT outsourcing contract had been signed. The interviews provided evidence that this has created an

anomaly or misalignment between how the customer and IT service provider assess and seek to mitigate IT risks

- Some of the organisations to some extent **disregarded compliance as being part of their responsibilities**. They put the onus on the IT service provider to comply with customer requirements which were set out in, for example, the contract schedules and service / product specifications. As a result any failure to comply (with for example IT policies and standards) by the IT service provider were found **'after the event'**. To summarise, the views on compliance were reactive rather than pro-active

- Some of the **key controlling governance processes**, enforced through contract clauses, with respect to the customers **reserved powers and rights** were found to be as follows:

  - Input into the selection of the IT service providers sub contractors and suppliers (some organisations had specified within the contract the right to veto). This ensured that sub contractors and suppliers were reputable and were not on a 'blacklist' based on previous working experience and knowledge

  - From a more technical aspect some of the organisations had specified reserved rights in the areas of the selection of appropriate IT technical architectures and software provision

  - Some organisations had retained the right to have a 'casting vote' over the IT service provider at meetings/forums where agreement on issues could not be reached by consensus. When used this has proved to be unpopular with the IT service providers but from a customer perspective it has proved extremely valuable

- **IT policies and standards** were viewed to be a **key control mechanism** to ensure that appropriate direction is set, managed and changed. The IT policies and standards were derived from publicly available IT industry sources such as the Office of Government Commerce (OGC) or the IT Infrastructure Library (ITIL) and covered areas as follows ;

  - IT Development (including IT technical architecture and IT systems design and development methodology)

  - IT systems Acceptance and Testing

- Hardware replacement policies (covering for example PC's and printers)
- Information Management (including data access, protection, control and storage)
- Information Security (i.e. computer anti-virus, internet security , and IT system and Personal Computer access and security)
- IT software provision
- Intellectual property rights (IPR)
- IT risk management
- IT related health and safety issues

**Question Area 6**

**Relationship Management and Interfaces**

How does the relationship management interface operate with the IT service provider?

- How is IT service performance monitored and managed?
- What relationship management processes and mechanism are in place?
- How does the formal and informal interface with the service provider operate?
- How do the business strategy, drivers and direction interface with the IT strategy and delivery? (Assuming this is the case)
- How is 'trust' achieved within the relationship (Assuming this is the case)
- What change mechanisms are in place and how effective are they?

**Key Research Findings**

- **Service performance** is primarily managed through a combination of contractual defined and agreed requirements, service specifications and service level agreements (SLA's). A common relationship mechanism is **a commercial and service review meeting**, which acts as a main forum to monitor progress against the defined service requirements

- There is evidence to suggest that the commercial and service review meetings in some cases have proved to act as a ***'panacea for all issues'*** and, have therefore, acted as a 'bottleneck' within the context of the relationship. The information overload issue had the consequence that additional non-contractual and informal meetings emerged. This had the obvious implication that overall control and governance of the relationship was difficult to achieve

- A key theme was that the relationship with the IT supplier had become **increasingly contractual**, this as opposed to some of the organisations original thinking that the relationship **should be based on mutual collaboration, partnership and trust**

- The majority of the organisations used **IT balanced scorecards** to drive and monitor relationship performance. Some of the IT balance scorecard measures were within the following areas;

    - **Financial performance** - for example keeping to agreed levels of expenditure

    - **Effective relationship management** - this has been measured by the use of customer and supplier satisfaction surveys

- **Operational performance** - this could be for example the performance of IT systems/applications or IT helpdesk performance

- **Project and Programmes** - a measure here could be the successful delivery of improvement projects and programmes within agreed time, quality and budgetary constraints

- **Change management** - some measures have been put in place to monitor if the IT service provider has successfully implemented IT service and product change requests

- **None of the organisations had formal mechanisms to ensure that their business strategy was aligned with their IT strategy**. Ad hoc or informal processes and dialogue had failed to achieve the desired level of strategic alignment. Also none of the organisations had put in place any formal or contractual processes to ensure that the IT service provider was aware of the organisations business strategy and key objectives / drivers

- **Projects and programmes are a key change mechanism** that delivers change in terms of providing new IT systems. However the research also identified change is required in the following areas;

  - To facilitate major changes to existing IT services

  - Changes to the IT service contract

  - Technology innovation and exploitation was viewed to be a key change mechanism however the IT service provider's commitment and performance in this area has been poor. The focus of the IT services provider has been on driving value from existing products and services rather than seeking to exploit innovation and new technology opportunities

  - Also **communications** internal to, and across, the customer and service provider organisations were deemed to be a key change mechanism. However some of the organisations stated that the communications interface with the IT service provider had room for improvement, there was a self confessed tendency to ***'communicate in silos'***

The general view was that the change mechanisms in place are inadequate to deal with a dynamic IT outsourcing environment

**Question Area 7**

**IT Outsourcing Benefits Realisation**

What have been the realised benefits of IT outsourcing? (Assuming this has been the case) and what have been the key learning points?

- Comparisons between targets set and results achieved
- How have benefits been measured (or have benefits been measured?).Have any balanced scorecard techniques or methodologies been utilised?
- Are realised benefits in line with anticipated benefits?

**Key Research Findings**

- An issue for some of the organisations was that **inadequate IT service performance** (including IT service quality and operational efficiency) **and financial metrics** were taken in-house before entering into the IT outsourcing arrangement .This made any subsequent post IT outsourcing benefits realisation measurement extremely difficult to administer

- No specific balanced scorecard methodologies were applied but general scorecards existed that measured financial, operational/ system performance and some customer satisfaction measures were also in place

- Two of the organisations chose subsequently to **reverse their IT strategy and in sourced their IT capability**. However this was for two different reasons, the first being that IT Outsourcing was clearly not delivering the anticipated benefits and the organisation chose, to as one interviewee stated ***'bite the bullet'*** and bear the costs to in source the IT capability that had previously been outsourced.

  The second reason was that one of the organisations was bought out by a larger global organisation who had a strong belief that business critical services such as IT should be provided internally

- **Benefits realisation in terms of achieving financial savings was found to be extremely poor.** The organisations stated that they were unable to achieve the anticipated savings, some key issues cited being;

  - With the rapidly changing business environment and associated major changes to IT demand there were **severe difficulties in keeping track of what were the original contract financial metrics.** This rapidly

changing environment resulted in the consequence that original financial benefits could not be measured

- ❖ Although some of the organisations were **able to cite some early or one off financial benefits** (i.e. cash injection from the sale of IT assets) **none of the organisations were able to claim they had achieved the potential savings identified during the contract negotiation and formulation period** (savings of between 10 and 20 % were cited by external consultants as stated in Question Area 1)

- ❖ Some of the organisations claimed that they had a **lack of commercial expertise** to manage the outsourcing contract. They found that managing a highly commercial external IT supplier was much more difficult than managing the previous internal IT supplier

- ❖ The lack of effective and efficient governance and controlling processes meant that many of the organisations cited a ***'loss of control'*** over the IT outsourcing environment. This ***'loss of control'*** was deemed to be a key factor in poor IT outsourcing benefits realisation

- ❖ A quotation from one of the interviewees summed up IT outsourcing for their organisation ***'IT Outsourcing has been an expensive way of saving money'***

- ➢ **A benefit which was stated to be realised by all the organisations was the move from a fixed to variable IT cost base**. By moving to a variable cost base the organisations stated that they had passed the problem of fluctuating IT demand onto the IT service providers. An issue however was that some of the organisations stated that they did not have the desired level of control over this variable and fluctuating IT cost

- ➢ **Where adopted the 'shared risk / reward' philosophy** (mentioned previously in question area 3) had **proven to be a success**. Evidence was provided where both the customer and IT service provider were able to share the **'rewards'** arising from successful joint IT service improvement initiatives

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