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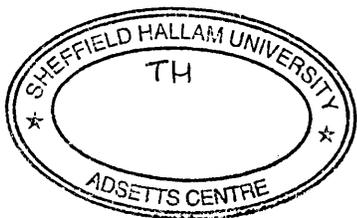
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Activity Based Management - a Study of Management Accounting Change

Karen Johnston

**A Thesis Submitted in Partial Fulfilment of the
Requirements of Sheffield Hallam University for the Degree
of Master of Philosophy**

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Abstract

This study has addressed the process of innovation in management accounting practice, with a particular focus on the implementation of Activity Based Management (ABM). It began with a review of prior organisational and management accounting literature, and identified three significant conceptual models which have been proposed as sense making devices in the examination of change processes. A further literature review examined ABM implementation literature and identified normative advice and empirical studies derived from that tradition. This literature review has been used to contextualise the current study, and to provide models against which to compare the grounded theory model developed in this study.

The primary research, which is described following the literature review, was interpretive, using a qualitative method, grounded theory. The data was gathered from accounting practitioners' accounts of their implementation experiences. This data has been analysed to develop a grounded theory of the process of ABM implementation, which is presented and explained in Chapter 5.

The grounded theory has then been compared to the models derived from the earlier literature review, and similarities and differences identified and discussed. Whilst the document recognises a number of limitations of the grounded theory model, it seems to offer insights into the process of management accounting change which extend and develop prior findings.

Chapter 1 Introduction

Management accounting change is an important area for research, given technical developments within the discipline and in the organisational and external contexts in which it is practised (Burns and Vaivio 2001). In their review of some of the prior literature in this area Burns and Vaivio argued that work in this area had been, and would continue to be, “theoretically pluralist”. They classified prior studies into three areas and proposed further research questions arising within them. The three areas were:

1. The epistemological nature of change – exploration of the nature of the change itself.
2. The logic of change – exploration of the functional and political rationales for change.
3. The management of change – exploration of aspects of this activity.

This study falls into the third of these categories, in which the substantive area of focus is an investigation of the process of innovation in management accounting practice, using data about the implementation of Activity Based Management (ABM). Management accountants are increasingly involved proactively in this type of change as systems designers, implementors and change managers (Cooper, 1996), and part of the role of research is to provide knowledge which will be useful to them (Burns and Vaivio 2001). This study follows Humphrey and Scapens (1996) call for research which results in insights into the intricacies, diversities or contradictions of accounting practice in contemporary organisations “driven by problems and issues relating to accounting practice”. It seeks to identify the nature of accounting practice in this context, and to gain insights into problems and issues faced by practitioners.

Practitioners have informed both the scope and approach adopted in this study, which is based on their accounts of implementation experiences.

Organisational change and the implementation of innovations have produced a long literature outside and within the field of management accounting (see for example Burns and Scapens 2000, Laughlin, 1991, Pettigrew, 1987, Rogers 1995, Orlikowski and Robey 1991). Identification of a need to study processes of management accounting change is widespread in the literature (for example Laughlin 1991, Burns and Vaivio, 2001), in the context of widespread changes to organisations' management accounting practices. Burns et al (1999) survey finding identified that management accounting change was occurring in 73 out of 91 organisations. This literature has developed towards a focus for enquiry into the complexities of change processes (Burns and Scapens, 2000) but as yet there has been little published work moving these ideas into an examination of the detail of practice.

Within the ABM literature there is a normative strand of ABM implementation advice, developed from positivist observations of practice (see for example Cooper and Kaplan 1997, Turney 1999). There are also a number of empirical studies of aspects of ABM implementation. As organisations began to introduce ABM a growing "failure literature" (Gurd & Thorn, 1997; Shields, 1995; Malmi, 1997) began to appear suggesting that it was proving problematic. A number of factor studies have sought explanations by identifying connections between implementation approaches and outcomes, (Cobb, Innes & Mitchell, 1992; Cooper, Kaplan, Maisel, Morrissey & Oehm, 1992; Friedman & Lyne, 1992; Shields, 1995). However these studies do not directly explain how and why changes to accounting practice occur, the meaning of "failure" in this context is not clear and the cause and effect relationships between variables and outcomes are not explained (Malmi, 1997). Organisations continue to

use ABT (Innes et al 2000), and accountants continue to be key players in implementation.

The prior literature has identified a need for a greater understanding of processes of innovation and of management accounting practice in those processes. Practitioners also identified this need, and sought to meet it through the ABM Exchange ,a discussion forum for practitioners facilitated by academics (Gibbon et al 2000a, 1998, 1997a). There have been six such meetings at which focussed discussions have sought to identify problems and issues experienced during ABM implementation, and to identify strategies for dealing with these issues. Practitioners wanted to learn directly about dealing with problems and issues from the first hand experiences of others engaged in similar processes. Proceedings at these meetings were recorded using a variety of media and form the basis for this study, in which data has been analysed following the techniques and procedures for developing grounded theory in Strauss and Corbin (1998).

Both the practitioner and academic communities were interested in ABM implementation practice, in particular in the problems and issues which have arisen during the process. This study examines practitioner accounts of implementation experiences, generates a grounded theory based on these accounts, and compares it with prior literature.

The objectives of the study were:

To develop a grounded theory of change processes relating to innovation in management accounting practice.

To increase knowledge and understanding of processes occurring during the implementation of Activity Based Management, of value to practitioners engaged in these processes as change managers.

To identify knowledge gaps relating to implementation practice, and research programmes to address these.

This study begins with a review of prior literature of management accounting change (Chapter 2) and ABT implementation (Chapter 3). The research method used is explained in Chapter 4, which is followed by the findings (Chapter 5). These are discussed in relation to the prior literature in Chapter 6, and conclusions drawn in Chapter 7.

Chapter 2 Change Literature

2.1 Introduction

This chapter examines prior literature on organisational change to provide a basis for comparison with the findings from this study. This chapter examines change process oriented management accounting literature beginning with two sociologically derived conceptual papers (Laughlin 1991 and Burns and Scapens 2000). Empirical work based on these models is also examined (Soin et al,2002 and Richardson et al, 1996). The final element of literature introduced in this chapter is an alternative conceptual process model taken from the diffusion of innovations literature (Rogers 1995). This offers a none sociologically based perspective which has been influential in other fields.

2.2 Conceptualising Management Accounting Change

Scholars across a variety of fields have identified a need to move from the dominant theme of prescriptive approaches, to an awareness of the importance and subtlety of process, people and teams. Mabey and Mayon White (eds. 1993) presented a range of readings to illustrate the “change in change thinking”, which the editors identified as a move towards change management based on participative approaches, with an emphasis on process extending to address politics and power relationships. Much of the process focussed literature is informed by Giddens’ structuration theory (for example Giddens 1982, 1993) as a sense making device.

Within the management accounting literature about change, a move away from simple linear models has occurred. Bhimani (1993) discussed conceptual approaches to accounting transformation and traced a development from a view of accounting as progressive, which did not address the wider forces on accounting, to a new accounting history which saw accounting as a social practice with social effects. From

this perspective accounting was viewed as the outcome, only in part planned, of a complex set of relationships, rather than as following an evolutionary path.

Accounting change was conceptualized as neither an inevitable consequence of a universal force of logic, nor a predictable outcome reflective of a rationale transcending contextual elements. Change was conceptualized as determined by circumstances rather than by essence.

Whilst the need to recognise the complex and subtle relationships between accounting and its environment has become accepted (Hopwood 1989, Dent 1991) the dynamic nature of these relationships is only beginning to be explored. A developing focus on processes of change is underway in the management accounting literature as in the wider literature indicated above. There is as yet little management accounting research output in this area (Innes and Mitchell 1990, Burns and Scapens 2000).

Scapens' work with a range of co-authors (for example Scapens1994, Roberts and Scapens 1985, Burns and Scapens 2000) demonstrates a shift in thinking from discussion of why management accounting did not change (Scapens 1994) to attempts to investigate management accounting change as a process (Burns and Scapens 2000), as in this study. This chapter therefore presents two influential papers concerned with conceptualising management accounting change processes, Laughlin 1991 and Burns and Scapens 2000. There is a common concern with complexity and with action/ structure relationships variously articulated. The models themselves are followed by examples of studies which have used them as analytical tools.

2.2.1 Skeletal Models Laughlin (1991)

Laughlin used the "content, context and process" view of organisational change developed by Pettigrew (1987), adding the perspective that organisations were naturally change resistant with a strong tendency to inertia and only change when

forced or kicked. The degree of transformation resulting from the "shock" was argued to be affected by temporal and organisational location.

Laughlin identified four planks of his analysis:

1. The skeletal models it contains needed empirical flesh.
2. The models plus flesh would begin a Habermasian discursive argument which would be open to challenge.
3. Organisations were conceptualised as an amalgam of three elements, interpretive schemes, design archetypes and subsystems. These range from the most tangible, subsystems, less tangible, design archetypes, and least tangible, interpretive schemes. The tangible element, sub systems, represents such organizational features as people, machines and buildings. Design archetypes are less tangible, representing organization structure, decision processes and communication systems. The least tangible and visible element, interpretive schemes, are the beliefs, values and norms held in the organization, its mission and purpose and the metarules followed.
4. Organisations are in balance until disturbed by an environmental jolt, the result can be first or second order change.

First order change - morphostasis – subsystems and design archetypes change but the interpretive scheme level is unchanged.

Second order- morphogenesis - the change affects all three elements

Four possible skeletal pathways for change were developed, rebuttal, reorientation, colonization and evolution. Each is briefly described below.

1. Rebuttal - The design archetype changes but the other elements are unchanged, eventually returns to original. This is a first order change since the interpretive scheme level is unaffected.

2. Reorientation- Both the design archetype and the subsystem elements change, though the interpretive schemes are still unaffected therefore this again is a first order change.
3. Colonisation - enforced 2nd order change, an environmental jolt disturbs the design archetype element, producing a response in the interpretive scheme and sub system elements. This type of change is driven through by a small group of people, and other organisational participants are forced to cooperate or leave. This is a second order change resulting in a new underlying ethos for the organization.
4. Evolution – This is a second order change involving major shifts in the interpretive scheme elements which is chosen and accepted by all organizational participants. It leads to "a common organisational vision based on shared values".

Laughlin concluded that Rebuttal and Evolution were theoretically possible but unlikely and cites examples of both reorientation and colonisation. Laughlin concluded by acknowledging that this paper "illustrates the power of the models to conceptualise changes, but the analysis doesn't indicate "why". Empirical detail is required to complement and complete the skeletal theory (Laughlin 1995).

Subsequent studies have used the model as an analytical tool, an example of which is discussed below.

2.2.2 Study Based on Laughlin's Change Model

This study, Richardson et al, 1996, provided a case study of accounting and the accountant in a particular organizational change process. In this article the authors found that Laughlin's model had allowed them to gain insight into the change process observed in the case organization. They used the concepts in the model to identify the

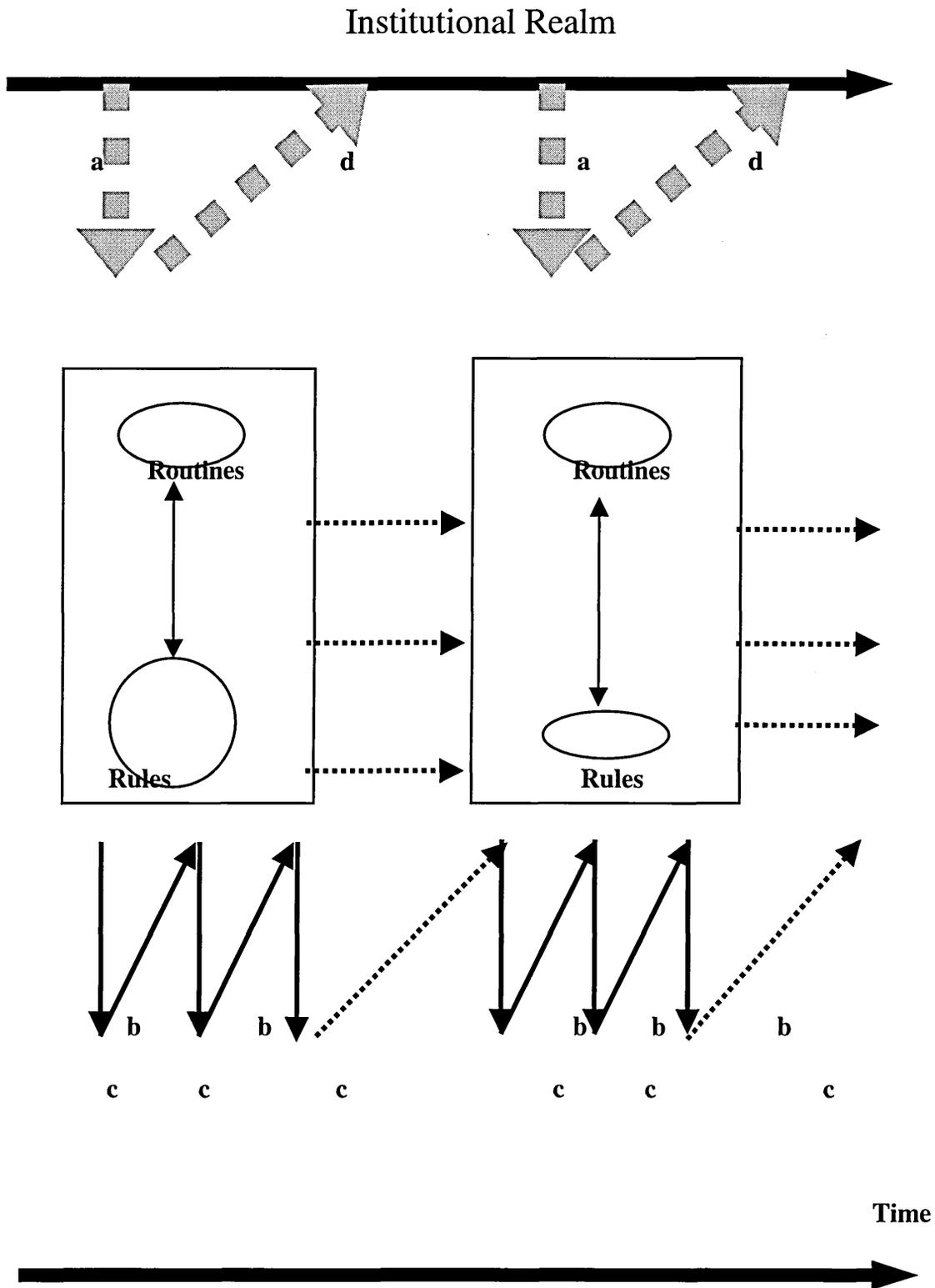
pathway of change as a type of colonization, and to identify two sets of interpretive schemes which were jockeying for position in the organization. Their analysis was used to add empirical flesh to the model following a middle range thinking approach (Laughlin 1995), and extended it by introducing the concept of pseudo-colonization.

2.2.3 Process Framework - Burns and Scapens 2000

A framework was presented in this paper, to describe and explain analytical concepts, which were argued to be useful in interpretive case studies of management accounting change within organisations. They were to be used as a starting point for a holistic understanding of the complex processes involved in management accounting change.

An illustration of the framework is shown below:

Figure 1: The Process of Institutionalisation Burns and Scapens 2000.



Realm of Action

Key: a = encoding

b = enacting

c = reproduction

d = institutionalisation

Two realms were identified, the institutional realm and the realm of action, linked by the modalities rules and routines. Four processes were identified in a cumulative process of change:

Encoding – existing routines embody prevailing principles and will shape new rules, drawing on taken for granted assumptions. New rules will in turn lead to the formation/ reformation of the ongoing routines.

Enacting – actors enact the rules and routines, which may involve conscious choice, but, the authors argue, is more usually the result of reflexive monitoring and the application of tacit knowledge about how things are done.

Reproduction- where repeated behaviour leads to a reproduction of the routines.

Conscious change was argued to require actors to assemble the resources and rationales to question the existing rules and routines. Unconscious or unintended change was argued to occur where monitoring systems are absent, or where there was a lack of understanding/ acceptance.

Institutionalisation – a disassociation of the patterns of behaviour from their historical context, obscuring relationship with interests of actors become the “way things are”.

“The institution is the taken for granted assumption that these routines represent the appropriate behaviour for a particular social group”.

The authors argued that only actions could be observed in order to learn about change processes, rules and routines cannot be directly observed.

They argued that because institutions “*always exist prior* to any attempt by the actors to introduce change, and will therefore shape the processes of change....it is important to examine the existing institutions” (p. 11) and that managing change in general, and management accounting change in particular, requires a thorough understanding of the current context of an organisation, especially its routines and institutions.

They also identified three dichotomies which would offer insights into processes of management accounting change:

1. Formal vs informal change – formal change occurs by conscious design whilst informal change occurs at a tacit level, for example by adaptation. They argued that it was reasonable to expect formal change to be easier than informal, but that informal change – an accompanying new way of thinking- may be required for successful implementation.
2. Revolutionary and evolutionary change – revolutionary change involves a fundamental disruption to existing rules and routines.
3. Regressive and progressive – relating to the effect on power differentiating between action which preserves existing power structures, and action which is designed to “enhance relationships.” and to the relative instrumental value offered by new management accounting techniques.

2.2.4 Study using Burns and Scapens 2000

Soin et al 2002 used Burns’ and Scapens’ framework, and the dichotomies they presented to interpret the role of management accounting in organisational change in a UK clearing bank. They explored intra organisational micro processes, and found the

Burns and Scapens model useful in its sceptical attitude toward claims of organisational transformation. They identified new characteristics of ABC implementation, and were able to identify the activities in the framework in the case. The dichotomies were used to develop insights into the case and identified aspects of both formal and informal change, classified the change as revolutionary with some regressive features.

2.3 Diffusion Theory

Rogers (1995) synthesised findings from the stream of diffusion scholarship over the preceding fifty years. Diffusion was defined as the process by which an innovation, an idea, practice or object that is perceived as new, is communicated through certain channels, over time, among the members of a social system. Research into the diffusion of innovations has generated a sizeable body of work across a number of fields ranging from anthropology in the 1920s through rural sociology in the 1960s, education, communication, marketing and geography (Rogers, 1995).

Models developed within diffusion research have been applied to aspects of management accounting (for example Bjornenak, 1997). They have focussed on the mechanisms affecting the spread of new accounting techniques through social systems for example, patterns of ABM adoption amongst organisations however, such studies have not addressed the change process during ABT implementation within organisations. Within each stage of the model, features of the implementation process, which direct attention to particular aspects of practice have been examined. These aspects of practice have been chosen because they have not been investigated in this context before.

Diffusion theory (Rogers, 1995) offers a range of models for research into elements of the diffusion processes as follows:

1. The generation of innovations
2. The innovation decision process
3. Attributes of innovations and their rate of adoption
4. Innovativeness and adopter categories
5. Diffusion networks
6. The change agent
7. Innovation in organisations
8. Consequences of innovations

Each of these areas of the theoretical model could be applied to the diffusion of ABM as an innovation, and in some cases have been, for example studies in accounting have used diffusion theory to explore patterns of adoption of ABC (Bjornenak, 1997). This study focuses on a process model of innovation in organisations (No. 7 above) since ABM falls into the category of innovation adopted by organisations

Figure 2

A model of the Innovation Process in Organisations (Rogers, 1995)

STAGE IN THE INNOVATION PROCESS	MAJOR ACTIVITIES AT EACH STAGE IN THE INNOVATION PROCESS
I. Initiation:	All of the information-gathering, conceptualising, and planning for the adoption of an innovation, leading up to the decision to adopt.
1. AGENDA-SETTING	General organisation problems, which may create a perceived need for an innovation, are defined; the environment is searched for innovations of potential value to the organisation.
2. MATCHING	A problem from the organisation’s agenda is considered together with an innovation, and the fit between them is planned and designed.
-----The Decision to Adopt -----	
II. Implementation:	All of the events, actions, and decisions involved in putting an innovation into use.
3. RESTRUCTURING	(1) The innovation is modified and re-invented to fit the situation of the particular organisation and its perceived problem, and (2) organisational structures directly relevant to the innovation are altered to accommodate the innovation.
4. CLARIFYING	The relationship between the innovation and the organisation is defined more clearly as the innovation is put into full and regular use
5. ROUTINISING	The innovation eventually loses its separate identity and becomes an element in the organisation’s ongoing activities.

Rogers (1995) identified a number of criticisms which have been directed at diffusion research, notably a pro-innovation bias, the implication that an innovation “ *should be*

diffused and adopted...more rapidly...neither reinvented nor rejected". He suggested overcoming this bias by investigation during the process of innovation, allowing investigation of a range of degrees of "success", and sensitivity to both the range of perceptions by adopters or potential adopters, and the broad context within which the diffusion process occurs.

2.4 Conclusion

This chapter has outlined the emergence of the study of change processes in management accounting as a significant focus area, alongside developments in the wider literature. Two conceptual frameworks proposing sets of constructs for making sense of management accounting change were presented. Both of these models were developed with the intention that they should be used as analytical tools in empirical studies of accounting change processes. As yet there has been little published work taking a process perspective on management accounting change, whether using these models or not. Comparison of the two models with the findings from this study is therefore appropriate in relation to their purpose. A non sociologically based conceptual mode from the diffusion of innovations literature has also been included to enrich the perspectives available from which to examine the grounded theory. The discussion of the findings of this study (Chapter 6) explores the relationship between the grounded theory as developed in this study, and the theories/ frameworks outlined in this chapter. Comparative analysis identifies complementarities and conflicts, and provides insights into the degree to which these theories correspond with practitioner perceptions and concerns.

Chapter 3 – Activity Based Techniques – Implementation Literature

3.1 Introduction

The changing nature of management accounting practice has become a widely accepted feature of the lives of its practitioners, the nature and extent of these changes having been discussed since the late 1980s (for example by Bromwich and Bhimani 1989, 1994, Burns and Scapens 2000). The implementation of new practices is important amongst the tasks faced by practitioners (see for example Cooper 1996) and Activity Based Techniques (ABT), first Activity Based Costing (ABC), and later Activity Based Management (ABM), are amongst these new practices. The introduction of ABT into organisations allows examination of change management practices and processes in action (Innes and Mitchell, 1994).

ABT implementation has been attempted in many organizations in both public and private sectors (Innes and Mitchell 1995, Innes et al 2000). This chapter reviews elements of the literature on ABT, with a focus on implementation. It does not therefore contain a detailed technical discussion (available elsewhere, for example Cooper and Kaplan 1998) merely noting that the emphasis of ABT literature moved through the 1990s from costing to cost management, presented as a strategic activity. ABM has developed in a tradition, which is focussed on the control and reduction of fixed costs, and the attempt to clarify the relationships between costs and actions. Johnson and Kaplan (1987) influentially argued that management accounting had “lost relevance” based on a view that costing practice was:

inappropriate in manufacturing and competitive environment

providing misleading cost information

subservient to financial accounting

Technical arguments for the introduction of ABT have been put since the late 1980s when US thinkers were writing about developments in cost management. Miller & Vollman (1985) produced an approach to the management of “The Hidden Factory” in response to the increasing proportion of overhead cost in manufacturing environments, and the need, which they identify, to relate these costs to the forces which cause them.

Whilst the implementation of innovations (Rogers 1995, Orlikowski and Robey 1991) has produced a long literature outside the field of management accounting, this wider literature has been little referred to by those writing about ABT, much of the work in this area has been conducted using factor studies, which have correlated factors hypothesised to influence ABM and some measure of outcome. Elements of the wider literature are included in Chapter 3.

The situation of practice is historical, the literature of ABM is part of that history, and part of the whole within which implementation practice is a part. This review of elements of the literature identifies discourses about ABM implementation which are directed at practitioners. These discourses form part of the situation of this research, as an element of researcher consciousness, used in the process of interpretation. They also represent knowledge accessible in the life world of practitioners, though to a varying degree of likelihood.

The literature presented below is organised into two sections:

3.2 Normative models of ABT implementation.

3.3 Empirical studies of implementation experiences

3.2 Normative Models of ABT Implementation

Amongst the books, which address ABT implementation, and are aimed at practitioners are two written by academics with a considerable track record of research and publishing in this field. Kaplan and Cooper (1997) base their book “Cost and Effect” on several dozen case studies undertaken over fifteen years work in the field. Turney (1996) also draws on case studies. These books also draw on advice and assistance from both consultants and practitioners. They are practice based works by authors who have been influential during the development of thinking and practice in these areas. Their informing epistemology appears to be towards the objectivist end of the spectrum and their theoretical perspective is positivist. As such they represent important elements of conventional wisdom in this area, and they suggest sequential steps to be taken in implementation. The approaches they take to implementation are each described below. Kaplan has also collaborated with Argyris (Argyris and Kaplan 1994) to produce another version of step by step process advice, and this is also included below.

3.2.1 Kaplan and Cooper

Normative thinking about cost management was presented by Kaplan, in a “how to” book aimed at practitioners, with Robin Cooper (Kaplan & Cooper, 1997). The book was based on observation of practice in organisations, following the model of development described in Kaplan (1994),

" The companies we work with become our laboratories both for understanding the innovation and for testing the generalisability and practicability of the newly developed and articulated ideas." (Kaplan 1994)

"working closely with companies, observing new practice, and developing theories to explain new practice" (Kaplan 1994)

The need for new practice was argued on the basis that traditional cost systems could not fulfill the three primary functions of a cost system :

Valuation of inventory for financial reporting

Costing of activities, products, services and customers.

Provision of economic feedback to managers and operators about process efficiency

They argued that a traditional cost system could not support these three functions, the first having been the dominant driver of the systems criticised in “Relevance Lost”.

The book therefore “provides a guided tour for how companies can migrate from inadequate traditional cost systems to a destination where cost and performance measurement systems are explicitly designed to produce the right information at the right time for essential managerial learning, decisions and control.” The introduction of a cost management system to produce enhanced organisational performance was presented as a technical task.

This “state of the art” book presented an extensive description of the technical features of ABC and ABM and differentiated between “strategic” and “operational” ABM (“doing the right things” and “doing them right” echoing Shank, 1989).

It aimed to be “a practical guide” to how cost and performance management systems could increase the profitability and performance of organizations. They explicitly “do not take the cookbook approach – describing 10 easy steps on how to implement”, and identified instead a two stage approach. They sought to provide “conceptual foundations” and “necessary understanding” which, they argued, would enable managers to take full advantage of the new approaches described (this reflected the importance assigned to influencing understanding as a mechanism for overcoming “defensive routines”, Argyris and Kaplan, 1994, below).

The book was organized around a four stage model of cost system design, summarized in figure3 below.

Figure 3 – Four Stage Model of System Design – Kaplan and Cooper

	Stage 1	Stage 2	Stage 3	Stage 4
Systems Aspects	Systems Broken	Systems Financial Reporting Driven	Systems Specialised	Systems Integrated
• Data Quality	<ul style="list-style-type: none"> • Many errors • Large variances 	<ul style="list-style-type: none"> • No surprises • Meets audit standards 	<ul style="list-style-type: none"> • Shared databases • Stand alone systems • Informal linkages 	<ul style="list-style-type: none"> • Fully linked databases and systems
• External Financial Reporting	<ul style="list-style-type: none"> • Inadequate 	<ul style="list-style-type: none"> • Tailored to financial reporting needs 	<ul style="list-style-type: none"> • Stage 2 system maintained 	<ul style="list-style-type: none"> • Financial reporting systems
• Product/ Customer Costs	<ul style="list-style-type: none"> • Inadequate 	<ul style="list-style-type: none"> • Inaccurate • Hidden costs and profits 	<ul style="list-style-type: none"> • Several stand alone ABC systems 	<ul style="list-style-type: none"> • Integrated ABM systems
• Operational and Strategic Control	<ul style="list-style-type: none"> • Inadequate 	<ul style="list-style-type: none"> • Limited feedback • Delayed feedback 	<ul style="list-style-type: none"> • Several stand alone performance measurement systems 	<ul style="list-style-type: none"> • Operational and strategic performance measurement systems.

Reproduced from Kaplan R. S., Cooper R., 1997, *Cost & Effect*, Harvard Business School, page 12.

Kaplan and Cooper suggested that most companies will have avoided stage 1, and were at stage 2. They “advocate” a migration to stage 3, which they suggested was possible for all companies “with modest expenditure on computer software and hardware”. The book had much to say about how to get stage 3 “right”. In the authors’ view many organizations were not achieving the full potential of their attempted migration to this level, and offered illustrations of how modern cost management can “and should” be applied. Stage 4 required that the new concepts were embedded into organizational and managerial processes. This final stage required a significant investment in technology to achieve an Enterprise Wide System (EWS), however they stress that managerial understanding of AB concepts and theory were crucial to its development.

In discussing the dangers of a migration directly from stage 2 to stage 4 the authors focussed on technical misunderstandings which were likely to occur. They suggested that organizations needed to experiment and learn in order to:

- structure for their own managerial purposes.
- solve technical measurement issues.
- explore the structure of feedback provided to employees for learning and improvement activities.

Having set out its aims and scope in this way the detail of the book addressed migration from stage 2 to stage 3 and stage 3 to stage 4. They identified four steps for the development of an ABC system.

1. Develop the activity dictionary – the issues identified here are about the level of complexity, which, it is argued should not be too great.
2. Determine how much the organization is spending on each of its activities – the authors state that the mechanics are well established, referring to the

- use of employee surveys/ questionnaires and other data gathering techniques. “The goal is to be approximately right”.
3. Identify the organisation’s products services and customers
 4. Select Activity Cost Drivers that link activity costs to the organization’s products services and customers – this step is described as a subjective trade-off between accuracy and the cost of measurement.

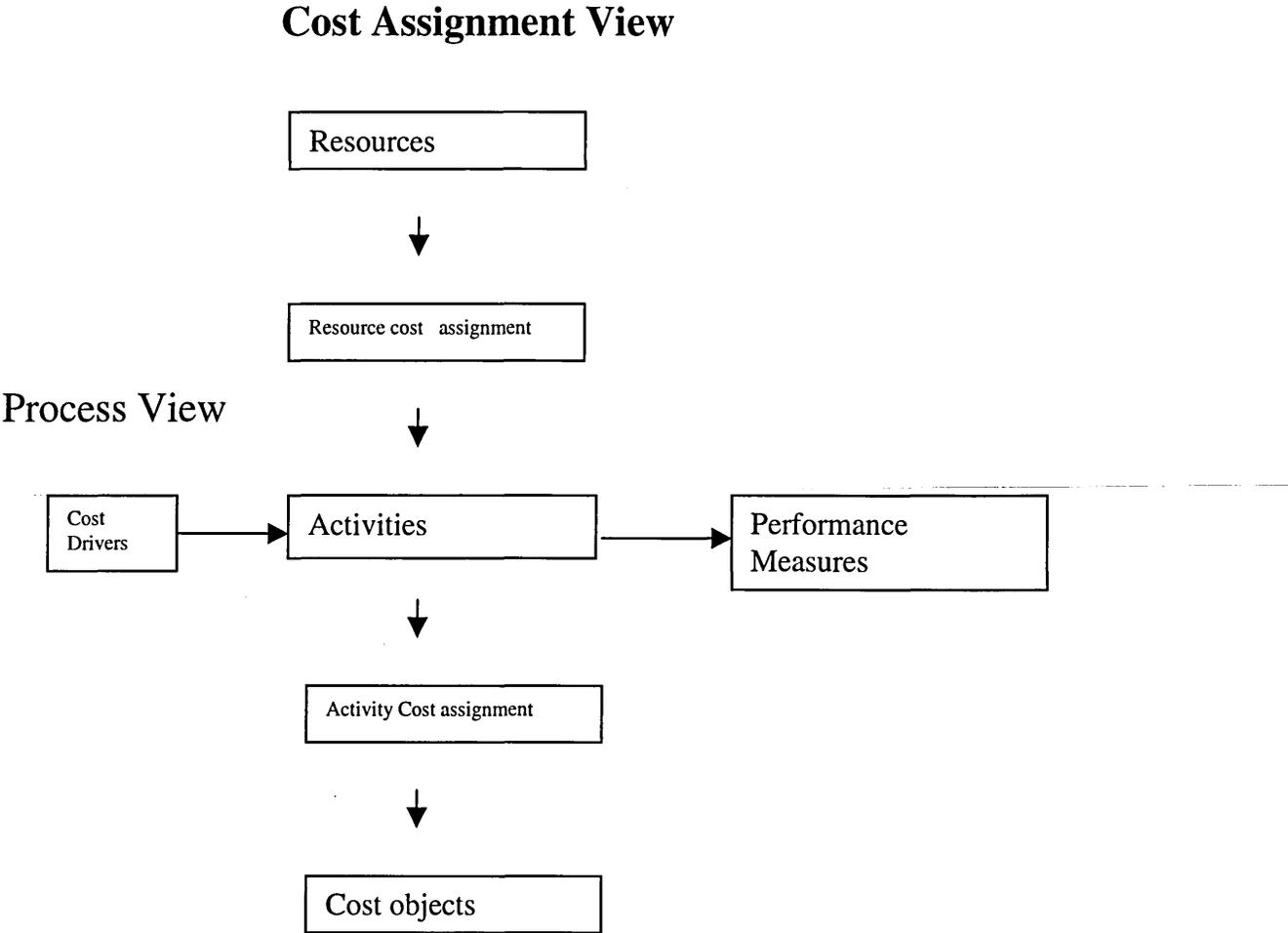
The book went on to describe technical aspects of Stage 3 in action, and following that stage 4. It contained no further specific implementation advice.

To summarise its approach to implementation, this book focussed entirely on technical issues, and included no material about the social dimensions of any of the stages, nor of migration. Insofar as people are referred to they are conceptualized as rational, profit maximizing, performance improvers. Their adoption of new techniques is conceptualized as being governed by understanding of the techniques. Whilst the theoretical case for ABTs was presented as a certainty for all organizations, an experimental stage during their introduction was argued to be crucial to determine how the techniques could be fitted to the organization.

3.3.2 Turney

Turney (1996) offered “steps and guidelines” to develop an ABC system. The first parts of the book provided technical descriptions. A full technical discussion is not reproduced here, the technical aspirations of ABC are summarized in the figure below.

Figure 4 – The ABC Model - Turney



Reproduced from Turney P. B. B., 1999, *Activity Based Costing The Performance Breakthrough*, page 81.

Chapters 10 to 15 ended the book with guidance on “how to do it”, implementation advice. These were based around a sequence of five sequential steps within which detailed activities were identified. The likely difficulty and complexity of the tasks proposed were repeatedly referred to. The sequence is as follows:

1. Convince management that ABC should be introduced
 - a. Generate interest – detailed suggestions offered.

- b. Remove barriers to acceptance – by dispelling myths.
 - c. Obtain management commitment – identify symptoms of a broken cost system.
- 2. Develop a strategy to take advantage of ABC's full potential – the sub-steps in this section are acknowledged as generic, issues to be thought about in an ABC context are briefly described.
 - a. Formulate objectives
 - b. Describe deliverables
 - c. Set the scope
 - d. Describe the organization structure
 - e. Identify team membership
 - f. Determine training requirements
 - g. Complete a project schedule
 - h. Budget the Costs
- 3. Collect data

Five methods identified, with some detailed guidance on interviewing
- 4. Design ABC model
 - a. Identify activities
 - b. Reconstruct the general ledger
 - c. Create activity centers
 - d. Define resource drivers
 - e. Select Activity Drivers
- 5. Manage use of ABC information – to ensure that the system remains current, cost effective, and widely used.

- a. Create useful reports
- b. Update the ABC model
- c. Improve support systems
- d. Distribute the ABC information
- e. Train the users

Turney's implementation guidance provided a brief outline of generic approaches to project planning and management, and to particular activities within the implementation process, and some detailed application suggestions for an ABC context.

3.2.3 Argyris and Kaplan

Argyris and Kaplan (1994) described "the series of processes required to implement an innovative technical initiative". They argued that a necessary precondition to managerial acceptance of a theory is that the theory must be demonstrably valid. They then proposed actions to overcome barriers to action which are not based on the theory's internal consistency or external validity. This study developed earlier work by Argyris (1990), in which he examined dilemmas of implementing accounting change and suggested that accountants find it difficult to cope with resistance or disbelief, necessitating the development of theory to find ways of bypassing the cause of such behaviour.

Argyris and Kaplan identified two processes, during the first of which, "Education and Sponsorship" change advocates explored and articulated the technical merits of the new proposal and gained senior management support. The second, they argued, "Create internal commitment", may be necessary to overcome defensive routines that

participants trigger to protect themselves from embarrassment and threat from the new ideas.

1. Process 1 –

- a. Education - Participants learn to understand the new ideas, their logic and validity, by means of three steps. Prior literature is cited as evidence that, for a general managerial audience, this stage is complete.
 - i. Identify the gaps in existing theory and practice (for example Miller and Vollman, 1985).
 - ii. Articulate a new theory that corrects the gaps (for example Cooper 1990).
 - iii. Provide examples of how the new approach benefits organisations (for example Cooper and Kaplan 1991).
 - b. Sponsorship – Persuade key individuals to lead the change process.
 - c. Align incentives – Enable the change to occur in the organisation.
2. Create internal commitment – overcome barriers created by defensive routines.

For ABC, the completed Education stage has produced “ a climate whereby initiatives can be undertaken by individual companies”. For implementation to begin in organisations key individuals and authoritative managers must become persuaded about the value of the new technical theory in their setting. They then become the initial “champions”, and persuade others within the organisation. Persuasion was characterised as “a logical, rational activity to show how and why ABC concepts work, and provide benefits to the organisation.” As this process gets underway

“serious organisational problems” were argued to result from unforeseen consequences, which may be embarrassing or threatening and undermine implementation.

Discussion of the second process “Creating Internal Commitment” was designed to address the “numerous” situations where information from an ABC analysis could be highly embarrassing or threatening. It would therefore result in managers engaging in “defensive routines” (Argyris 1990) and this second process overcomes these defensive routines, promoting learning and testing. If doubtful managers are willing to experiment in order to test their concerns, a rational enquiry programme could be used to produce commitment. Defensive behaviour could be used productively to generate tests of the theory’s effectiveness.

3.3 Empirical Studies of Implementation Experience

Innes et al (2000) examined trends in the consideration, adoption and use of ABM and their discussion of implementation identified “the problematic and costly design, implementation and operation” of ABT systems as a strand in the prior literature which expressed reservations about these techniques in counterpoint to the “advocacy” literature from which section 3.3 was drawn. The work reviewed in this section comprises studies of ABT implementation experience, which have mainly focused on identifying factors influencing implementation outcomes.

Cobb et al (1992) examined practitioner experiences and reported the “top five activity based problems experienced by accountants “. These were:

- amount of resource required

- accurate data collection (especially on cost drivers)

- activities crossing departmental boundaries and areas of responsibility

- other changes higher priority

heavy demand on time of system design and implementation.

As experience of using ABC in practice has occurred, research began to appear analysing the outcomes. Spicer (1992) summarised previous work as having occurred in two stages. There had been an initial phase of case studies focussing on how/ why firms had implemented activity based systems. Individual ABC systems were documented and analysed in terms of their differences from conventional systems. Outcomes were described as they affected product cost and price, product and process design. The second stage produced cross case interpretation leading to taxonomies of practice and the conceptualisation of design and development issues.

Despite the available literature, implementation continues to prove problematic in practice, (Innes et al 2000). In a study of implementation experiences Shields (1995) found a moderate level of success experienced, and “considerable variation in degree of success firms have with ABC”. The “ABC failure” literature previously referred to seeks explanations for such findings, and to generate implementation advice. The studies discussed below illustrate a range of findings, the final two (Anderson and Young, and Friedman and Lyne, both 1999) have been taken to represent up to date findings in this area.

Cooper et. al (1992) attributed problems of implementation to organisational and behavioural issues, and suggested that management support, non accounting ownership, and training programs designed for users can influence the success of ABC implementation.

After a field study of 8 sites where ABC models had been developed, they suggested an explicit structure for sponsorship and implementation of an ABC project. In a two stage structure, “Analysis” followed by “Action”, they identified a requirement for four actor roles – Advocate, Sponsor, Change Agent and Target. The target is defined

as an individual or group whose behaviour and actions are expected to change, and the lack of a target is identified as a reason for projects which “stall” before the Action phase.

They concluded that “A successful activity based cost management project requires both sound project management skills for the analysis process and, even more important but more difficult, strong skills in managing the organisational change process if decisions and actions are to be taken.”

Fundamental Implementation steps: (Cooper et. al 1992)

1. Determine the scope, timing, and objectives of the project
2. Fact find.
3. Develop a project team and work plan.
4. Carry out training.
5. Capture activity-related information
6. Do value-valued coding of activities.
7. Create activity centres.
8. Code payroll expenses into hierarchy.
9. Split and code none payroll-related expenses
10. Identify and capture cost driver information.
11. Load the model.
12. Run the model and generate reports.

Sheilds (1995) also identified several behavioural and organisational variables as important in explaining cross sectional variation in ABC success:

top management support

link to competitive strategies

link to performance evaluation and compensation

training

ownership by non-accountants

adequate resources

A study undertaken by Innes and Norris (1997) identified a relationship between the benefits arising from the introduction of ABT and implementation activities, using cross case analysis:

education promotes managers understanding and “ownership” of accounting information

champions link to commitment to use of information.

implementation resources link to level of detail

design of system for purpose, and usefulness for managers

They concluded that there were benefits to be gained from the introduction of ABC, and there were successful implementation methods, which impact on outcomes.

Malmi (1997) placed his work at “this early stage of understanding accounting change in general and ABC implementation in particular”, and argued that prior factor studies do not explain how and why change occurs. He used a case approach to explore ABC “failure” by investigating underlying causes which induce individuals to resist new accounting systems.

In this study there were two areas for examination. The first was the meaning of “failure” in this context, recognising that since accounting is used in various ways, some failures were actually successful, but for other purposes. This point was also made by Friedman and Lyne (1999). The second was resistance, for which three sources were identified, rational, political, and cultural. His analysis produced a complex picture of implementation and raised organisational and behavioural matters which were not raised in the literature already reviewed. These were:

Different stakeholders have different agendas.

Competing and complementary sources of information

Effect on power relationships (for example via transfer pricing)

How does ABC/M fit into existing formal and informal accounting and control systems?

He also argued that in some contextual settings ABC was unlikely to thrive, regardless of how skilfully the project was managed.

Friedman and Lyne (1999) presented the results of a long term study of ABT implementation, in which they examined “ the factors and circumstances that contributed to the long term success and failure of activity based techniques”. Their findings supported those in the prior studies already referred to. In addition they argued that the factors they identified were interrelated, and that sensitivity to individual company circumstances was needed when implementing. They also argued that a range of definitions of success and failure were adopted, even within one organisation.

Figure 5 Friedman and Lyne 1999, Significant Aspects of Success and failure in the Six Main Cases

Company	Significant Aspects Leading to Success	Primary reasons for failure aspects in success cases
Brent	Strong requirement to cut overheads Support from managing director Specific staff dedicated to ABM Link to bigger BPR project	Initiative overload causing lack of focus and resources Bad feeling from first ABM exercise. Not all senior managers saw need for ABM.
Cambourne	Urgent need to cut costs and reduce waste. Promise of no forced redundancies. Enthusiasm from group of management accountants. Sufficient support from plant and corporate management.	Rapidly increased workload on managers and accountants. Other improvement initiatives given higher priority by managers. Rapid turnover of key staff. Suffered from being pioneer ABM company in group.
Feltham	Commitment of an individual to ABT Early work demonstrated value of ABT Improvement in reputation of management accountants Senior management pleased with experimenting with ABT	Over reliance on single individual All levels of management had other higher priorities Accounting system could not provide data needed for ABC
Philpot	Initial enthusiasm of few staff ABC project that had clear benefits Support from corporate HQ for later project Embedding ABC in company procedures	Lack of initial focus Key staff left ABT not well resourced of supported initially
Wavering	First uses of ABT had been successful and also improved reputation of management accountants Incorporating ABT principles in other techniques Effective use of consultants	Strong functional boundaries within company Other techniques had higher priority Company restructuring absorbed all available resources FD saw benefits of activity based data, not ABC
Zircon	Clear need for cost information Keen staff Using ABT for small well defined problems	Key staff leaving Lack of strong support from senior management Swamped by larger BPR project Lack of resources at key times

Their main recommendations for implementation practice were as follows:

1. A compelling business need – accepted by those implementing and using the technique.

2. Broad based support – actively developed through early tangible benefits, gradual approach, allaying fears and building confidence.
3. Support from senior management – echoing prior findings.
4. Embed ABTs in structure or practice.
5. Adequate project resource – in particular of key staff.
6. Sensitivity to links with other initiatives.
7. Succession planning for key individuals – enthusiasts are identified as playing useful individual roles which organisations need to capitalise on.

Anderson and Young (1999) undertook a study of implementation practice in two organisations, and took as their departure point a “widespread agreement in the academic literature on broad correlates of ABC effectiveness”. This agreement is demonstrated in the literature reviewed above. They developed a table of candidate factors implicated in ABC project outcomes from prior literature, as shown in Figure 6 below. Factors were classified into “contextual” and “process” factors. Contextual factors were further classified into individual and organisational factors. Process factors were classified between those reflecting interaction between the project team and the organisation, and those reflecting the internal functioning of the project team. Their study excluded investigation of the intra team process factors indicated in the table.

The structural model of ABC implementation that they proposed was that context influenced both the implementation process and the evaluation of the final system, “process” factors only influenced evaluations of the system. Their study of two organisations in the motor industry investigated associations between evaluations of ABC systems and contextual factors and process factors. They also investigated associations between context and process factors. Evaluation measures used were

“overall”, “use of the data” and “accuracy. They argued that the existence of “specific exogenous factors that make ABC less suitable and that are unlikely to be remedied by improving the implementation process” so that although the process of implementation affected the outcomes, both the process and outcomes were directly affected by the contextual setting.

Their findings in these areas were extensive. Those which relate to the areas relevant to this study were as follows. They found that the overall evaluation of the system was related to top management support, union support and the adequacy of resources devoted to the project. They found that the evaluation measure “accuracy” was influenced by resources devoted to the project. The only contextual variable implicated was the respondent’s felt need for change in practice. Use of ABC data was found to be linked to top management support and adequacy of resources.

Contextual variables which influenced use were argued to be individual’s commitment to the organisation, the likelihood of employee layoffs and the reward environment. They found their results were , to some extent, influenced by time and the maturity of the implementations they were examining, for example the influence of top management support was variable, though the effects of this issue could not be fully explored in their study.

Figure 6 Anderson and Young 1999 Variables Implicated in ABC Project

Outcomes

Variables Implicated in ABC Project Outcomes	Contextual Factors		Process Factors	
	Individual	Organisational	Project mgt	Team
Individual Characteristics				
Disposed to change	X			X
Production process knowledge	X			X
Role Involvement	X			X
ABC training	X			
Organisational Factors				
Centralisation		X		X
Functional Specialisation		X		X
Formalisation/ job standardisation		X		X
Vertical differentiation		X		
Formal support in accounting function			X	X
Support			X	X
Top management				
Local Management				
Local Union				
Internal Communications		X		X
Extrinsic reward systems		X		X
ABC training investments			X	X
Technological Factors				
Complexity for users				X
Compatibility with existing systems		X		X
Relative improvements over existing systems (accuracy and timeliness)		X		X
Relevance to firm's decisions and compatibility with firm strategy		X		X
Task Characteristics				
Uncertainty/ lack of goal clarity				X
Variety				X
Worker autonomy				X
Worker responsibility/ personal risk				X
Resource adequacy			X	
Availability of ABC Software			X	
External Environment				
Heterogeneity of Demands		X		
Competition		X		
Environmental uncertainty		X		
Likelihood of layoffs				
Growth opportunities				
Labour relations				
Importance of site to company				
External communications/ external experts		X		X

3.4 Conclusion

This chapter has reviewed two sections of prior literature relating to ABT implementation, normative models and empirical studies. The normative models of implementation produced by **promoters** of ABT seemed to suggest that these could be introduced into any organisational setting. Kaplan and Cooper focussed on the need for **experimentation** during the early stages of implementation, and on **persuasion** as an important implementation activity, **unforeseen consequences** were identified as a source of implementation difficulties. Turney's more detailed advice began with promoting the ideas in the organisation, then developed into a step by step "**recipe**" approach. Early empirical studies of ABT implementation practice identified sources of difficulty, and factor studies identified links with "outcomes". More recent work has explored the complexity of ABT implementation, but continued to examine links between factors and outcomes. The studies by Friedman and Lyne (1999) and Anderson and Young (1999) are recent significant examinations of ABM implementation, and the relationships between their findings and findings from this study are discussed in Chapter 6 .

There is a shared view that the introduction of ABT was "difficult and complex" (Turney), and that accountants found "resistance and disbelief" challenging. Whilst both Malmi and Anderson and Young suggested that in some contextual settings implementation activities would have a limited effect on consequences, ABT implementation has still been attempted in such settings, practitioners must still make choices and act .

This literature of normative theories and empirical studies is compared with the grounded theory developed in this study in chapter 6. The examination explores the degree to which practice and theory in ABM implementation seem to be aligned, and

the degree to which this study supports, refutes or extends prior findings, in particular those of Friedman and Lyne and Anderson and Young.

Chapter 4 Research Methodology

4.1 Introduction

This chapter will explain the research approach taken by identifying and explaining the choices of the epistemology, methodology and methods adopted and their relationship to the research question. It will also describe the research activities actually undertaken. These research activities were part of a larger project undertaken with colleagues from Northumbria University. The data generated was made available to me by the group for individual use in this grounded theory study. The group activities are described section 4.4.3.1 below.

4.2 Epistemology

Epistemology has been defined by Crotty (1998) as the theory of knowledge which is embedded in the theoretical perspective taken and thereby in the methodology, a way of understanding “what it means to know”. The epistemological stance taken in this work can be explained by reference to the classification given by Gioia and Pitre (1990). They presented an argument that the use of any single research paradigm produces too narrow a view to reflect the multi-faceted nature of organisational reality, and provided a description of the integration of two paradigms. The authors used the Burrell and Morgan (1979) matrix displaying four possible paradigms.

Radical Change

subjective		objective				
	<table border="1"><tr><td>Radical Humanist</td><td>Radical Structuralist</td></tr><tr><td>Interpretivist</td><td>Functionalist</td></tr></table>	Radical Humanist	Radical Structuralist	Interpretivist	Functionalist	
Radical Humanist	Radical Structuralist					
Interpretivist	Functionalist					

Gioia and Pitre suggested that each of the four paradigms produces a variation of the truth, and provided the following table outlining their key characteristics:

Figure 7 Table of Research Paradigms – Gioia and Pitre

Interpretivist Paradigm	Radical Humanist	Radical Structuralist	Functionalist
Goals to DESCRIBE, EXPLAIN in order to UNDERSTAND and DIAGNOSE	Goals to DESCRIBE and CRITIQUE in order to CHANGE (achieve freedom through revision of consciousness)	Goals To IDENTIFY sources of domination and PERSUADE in order to GUIDE revolutionary practices (achieve freedom through revision of structures)	Goals To SEARCH for regularities and TEST in order to PREDICT and CONTROL
Theoretical Concerns SOCIAL CONSTRUCTION OF REALITY, REIFICATION PROCESS INTERPRETATION	Theoretical Concerns SOCIAL CONSTRUCTION OF REALITY	Theoretical Concerns DOMINATION ALIENATION MACRO FORCES EMANCIPATION	Theoretical Concerns RELATIONSHIPS CAUSATION GENERALISATION
Theory Building Approaches DISCOVERY through CODE ANALYSIS	Theory Building Approaches DISCLOSURE through CRITICAL ANALYSIS	Theory Building Approaches LIBERATION through STRUCTURAL ANALYSIS	Theory Building Approaches REFINEMENT through CAUSAL ANALYSIS

Gioia and Pitre stated that most organisational work has been within the functionalist paradigm, assuming that the nature of organisations is objective and leading to a deductive approach to theory building. Functionalist researchers have sought to examine regularities and relationships that lead to generalizations and universal principles, working deductively, beginning with prior theories leading to hypotheses,

which influenced the data collection instruments. This type of approach becomes problematic when dealing with subjective interpretations of both organisation members and researchers.

The interpretive paradigm assumes that people socially and symbolically construct and sustain their own organisational realities. The stance towards theory building is to become part of the evolving events studied, to see from the perspective of the organisation members experiencing the structuring processes. Analysis begins during data collection to discern patterns in the data, thereafter analysis, theory generation and further data collection go hand in hand, in an iterative, cyclical pattern leading to a grounded, substantive, mid-range theory. That is, they fall between the "minor working hypotheses" of everyday life and the "all-inclusive" grand theories".

Although the central assumptions of the paradigms are at odds, the boundaries are transition zones. At the interpretive/ functionalist transition zone - structuration places structuring and structures on an equal footing, structure is both the medium and the outcome of interactions, and bridges the gap between subjective and objective views. This study has been classified as being at the interpretivist/functional transition zone within this scheme for the following reasons. Its goals of the study focus on explanation, understanding and diagnosis of practitioner concerns and experiences. Its theoretical concerns include interpretation and identification of action/ structure relationships, and the theory building approach adopted has been one of discovery through code analysis.

4.3 Methodology

Methodology has been taken to mean, in broad terms "way of thinking about and studying social reality" (Strauss and Corbin, 1998), and, more specifically, "the strategy, plan of action, process or design lying behind the choice and use of

particular methods and linking the choice and use of methods to the desired outcomes” (Crotty, 1998). This study is qualitative, based on the grounded theory method developed by Strauss and Corbin (1998). Their definition of qualitative research is research which “produces findings not arrived at by statistical procedures or other means of quantification.”

The choice of a qualitative approach is consonant with the interpretive paradigm, and with a study which seeks to “create new and theoretically expressed understandings” (Strauss and Corbin, 1998) of practitioner experiences during ABM implementation. The choice of a qualitative approach has been driven by the exploratory nature of the research problem, the process of management accounting change being a substantive area about which little is yet known (Burns and Scapens 2000).

In their examination of qualitative research experiences in organisations Cassell and Symon (1994) identified a number of characteristics of these methods which have been found to be important in practice. A brief discussion of the connection between those characteristics and this study follows, in order to further explicate the basis for the choice of approach taken. They argued that such research is often not driven by hypotheses, but concerned with emergent themes, and this study seeks to explore the nature of practice without the imposition of a previously developed framework.

They further argued that the flexibility of qualitative methods in their ability to respond to changing circumstances and to admit a range of data types, strengthens their ability to address complex processes such as the ABM implementation process which is the concern of this study. This Study is concerned with change, and Cassell and Symon argued that “only qualitative methods are sensitive enough to allow the detailed analysis of change”.

A final connection is in respect of the role of the researcher and the researched. In this study the members of the ABM Exchange were active and knowing participants in an endeavour to know and understand more about the process of ABM implementation. Cassell argued that employees were participants in, rather than subjects of, qualitative research. This researcher/ researched relationship was argued to promote the transparency and accessibility of the research outcomes to “the researched”, and to allow the generation of further insights for the researcher through social interactions within the research process. This study was born out of a practitioner search for knowledge, and has been built around an exchange mechanism during which the generation of insights through sharing experiences has been a key element. It therefore also exhibits this characteristic relationship found in many other qualitative studies.

4.4 Grounded Theory

4.4.1 Grounded Theory Introduction

Grounded theory is rooted in symbolic interactionism, a perspective within the interpretive approach (Crotty, 1998). Blumer (1969) identified three fundamental premises of symbolic interactionism:

1. Human beings act towards things on the basis of the meanings that the things have for them.
2. The meaning of such things is derived from, or arises out of the social interaction that one has with one’s fellows.
3. These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things encountered.

To conduct research in this approach, it is necessary to understand the world of the actors, and to illuminate relationships within this world. These are fundamental concerns of this study.

The grounded theory methodology was originally developed in the field of sociology by Barney Glaser and Anselm Strauss. It has subsequently been used by researchers in many other fields including education, nursing, business and social work (Strauss and Corbin 1998). The research method used in this study was based on the approach set out by Strauss and Corbin (1998). Their definition of grounded theory is “theory that was derived from data systematically gathered through the research process”. Whilst their book provided detailed discussion of elements of the grounded theory method, it emphasised the necessity for each researcher to develop an individual approach to the design and use of these ideas. This study has therefore taken an individual shape and form.

The method has been widely used in a range of disciplines, and while the use of grounded theory based approaches in published accounting research has not been widespread, its use has been advocated (Parker and Roffey 1997). They argued that it facilitated studies of accounting practice by admitting a greater range of data sources, including naturally occurring verbal exchanges, interviews, reports, minutes of meetings, correspondence and so on. The data in this study was of this wide ranging nature, requiring a method of handling and analysis which could address its volume and complexity.

Parker and Roffey (1997) also argued that grounded theory allows for the investigation of one case through to a large number of cases, which again was a feature of this study. A further feature which they identified was that rather than focussing exclusively on describing field members’ sense-making activities and

interactions, grounded theory aims to incorporate the researcher's understandings. Finally they stated that it attempts to develop explanatory theoretical frameworks representing structures and processes observed, which matches the aims of this study.

4.4.2 Grounded Theory – Strauss and Corbin

The method followed, as previously stated is based on Strauss and Corbin's (1998) approach. It does not contain all of the possible activities identified by Strauss and Corbin, those adopted are identified below.

1. Open coding

“the nature or essence of an object does not reside mysteriously within the object itself but is dependent upon how it is defined” (Strauss 1969 p 20). Codes provide the link between data collection and its conceptual formation. The development of codes during the initial coding phase served to summarise, synthesise, and sort the many observations made of the data. The aim, as stated by Parker and Roffey (1997) is to “make codes fit the data, rather than force the data into codes.” Open coding refers to that part of analysis that deals with the labelling and categorising of phenomena as indicated by the data. The products of this labelling are concepts – the basic building blocks in grounded theory construction.

2. Categorising

The process of grouping concepts at a higher, more abstract, level is termed categorising. Axial coding put the open coded data together in new ways by making *connections* between a category and its sub-categories (i.e., not between discrete categories which is done in selective coding). Thus, axial coding refers to the process of developing main categories and their sub-categories. It involves relating categories to sub categories, linking at the level of properties and dimensions to form more

precise and complete explanations about phenomena, it looks at how categories cross cut and link. The process may involve the following

1. Lay out properties and dimensions of a category
2. Identify variety of conditions, actions/interactions and consequences associated with a phenomenon.
3. Relate a category to sub categories through statements denoting how they are related.

3. Theory building

Selective coding involved the *integration* of the categories that have been developed to form the theoretical framework.

4. Memo writing

Throughout this process of theory development Strauss and Corbin stated that one major process dominates the research process - memo writing. They recommended that memo writing takes place throughout the research process, starting with the first interview or observation. Through memo-writing the researcher was expected to move directly into analysis of the data. Memos were defined as written elaboration of ideas about the data and the coded categories. Memos have been used throughout this study.

5. The Paradigm

In this study Strauss and Corbin's concept of "the paradigm" has been a crucial element in the analytical process. It was described as an analytical tool to help analysts integrate structure with process, to capture both how and why and to capture the dynamic and evolving nature of events. Structure was defined as the conditional context in which a category is situated. Conditions were to be discovered in the data and traced for their full impact by analysts, may be micro or macro. Causal conditions

were said to influence phenomena, intervening conditions mitigated their effects, contextual conditions were the particular intersection of causal and intervening conditions. Analytical focus was to be on the complex interweaving of conditions leading up to action/ interaction. Processes could then be identified as sequences of action/ interaction pertaining to a phenomenon as they evolved over time. This paradigm was used in the axial and selective coding phases of this study

The resulting theory “will not be the only possible interpretation of the data...but it will be plausible, useful, and allow its own further elaboration and verification” (Strauss, 1987). The researcher in this study accepts responsibility for an active role in interpreting what has been observed, seen and read during this study. The theory produced as a result is traceable to the data from which it has been developed.

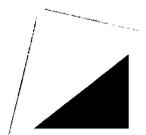
4.4.3 Grounded Theory Building – This Study.

The following sections describe the actual process of grounded theory building in this study. It begins by describing the data gathering activities, then explains the analytical process.

4.4.3.1 Data gathering

Before discussing data collected specifically as part of this study, it should be noted that in common with other studies of this type, “experiential data from the researcher’s own professional, academic and personal background in relation to the study will be used to code, categorize, verify categorizations and develop emerging theory.” (Parker and Roffey 1997).

The empirical data for this study has been collected during participation in the design and operation of a practitioner network. The network was to facilitate the exchange of experiential knowledge of the process of implementation of Activity Based



Management (ABM). It was provided with administrative and financial support by CIMA's Employers Group and was called "the ABM Exchange".

Data gathering has occurred using the following methods, identified briefly and then described more fully below:

Field Studies

Initial field studies – three brief and one longer study prior to the first Exchange meeting.

Host Site Studies – undertaken in preparation for the four on site Exchange meetings.

ABM Exchange Data

Survey data relating to the participants.

Records of discussions which took place.

Field Studies

Initial Field Studies

Initial work undertaken within the local CIMA Regional Employers' Group began in response to a request from practitioners in the group, who wanted to learn from each other's experiences of attempting to implement ABM. Field studies of four of the organisations were undertaken by academic members of the group. Interviews were based on a common semi-structured outline, and the researchers' notes reviewed and agreed by the original interviewees.

Table 1 Initial Field Data Gathering

Name	Health	Waterco	FMCGco	Manufco
Duration of interviews	N/A	1 Day	1 day	3 days
Interviewees	N/A	Team leader	Accounting team member	Financial controller 3 team members, 1 operational manager
Researchers on site	1	2	1	1
Primary Data gathering	Participant observation 3 months	Semi structured interviews	Semi structured interviews	Semi structured interviews Internal documents

A cross case analysis was used to develop the framework for a day long workshop which launched "The ABM Exchange". This analysis (Gibbon et al 1997) conceptualised features of the process of ABM implementation, and identified “patterns” of organisational conditions, implementation actions and consequences. The Health, Waterco and FMCGco studies are not used directly in this research, except as reported in Gibbon et al 1997, which has been included in the early analytical step of open coding (see grounded theory building description below). Manufco (Gibbon et al 2000) was a more extensive study, carried out directly by this researcher, and the field notes and other evidence have been incorporated into this study.

Host Sites- Further Field Studies

Further field studies were undertaken to prepare for the design and facilitation of further Exchange meetings. Again interviews were based on the common semi-structured outline, and the researchers’ notes were reviewed and agreed by the original interviewees.

Table 2 Host Field Data Gathering

Name	Delivco	Infraco	ITServ	Bigbank
Duration of interviews	1 Day	5 days	3 days	2 days
Interviewees	Team leader +2 team members	4 key project team members, 3 finance , one operational	Project manager + 2 team members	Both team members
Researchers on site	2	4	3	2
Primary Data gathering	Semi structured interviews Internal documentati on	Semi structured interviews	Semi structured interviews Internal documentati on	Semi structured interviews Internal documentati on

Researchers' notes of the interviews were reviewed by interviewees, any disagreements discussed with alterations made. Relevant documents were also used to extend the information, and for triangulation (Otley & Berry, 1994) purposes. The measures used to enhance the reliability and validity of the information gathered match those suggested by Scapens (1990), being feedback to subjects and a team of researchers with different interests and backgrounds.

ABM Exchange Data Gathering

Two types of data have been gathered from ABM Exchange Events, survey data and records of discussions. In the presentation of findings the Exchange meetings are referred to as E1 to E6. Participants were actively involved in testing their interpretations, and seeking to learn. Host sites in particular were able to demonstrate reflexivity. Each is described below:

Survey Data

Two sets of survey data were produced. The first was an outcome of the *screening* procedure operated in advance of the meetings. The second was a brief *questionnaire*

completed during the event. Both types of survey data are included in the study. The results are recorded using SPSS package to enable analysis and presentaiton.

CIMA branch and employer members were invited to ABM Exchange meetings, acceptance was subject to sufficient practical experience to contribute to the workshop discussions. Pre attendance screening data included information about the maturity of the ABM project, the role of the participant, the nature of the organisation and the discussion area of interest to the participant.

The grouping of participants during the Exchange meeting aimed to ensure that each group had at least three experienced practitioners and that there were at least two members in each group with comparable experience and from comparable industry sectors. This grouping aimed to benefit participants by matching helpful contacts and to benefit the research process by promoting informed discussion.

Exchange meetings took place during one day. After a brief welcome and introduction outlining the work done to date participants separated into small workshop groups.

Prior to each of the three workshops a plenary session by the host introduced the discussion area. This presentation of the practical experiences of the host organisation served to clarify the topic area and encourage participants' own thoughts.

Once in groups participants were asked to complete a brief *orienting questionnaire* which contained a mixture of open and closed questions around the discussion subject and these were retained. The questions were based on the analysis of issues raised in previous case studies and exchanges and focused participants on the key areas to be explored.

Records of Discussions

The facilitated discussions which followed were structured around the questionnaire, which allowed participants to elaborate on questions and to explore solutions to problems. These discussions often highlighted other issues which were causing concern to practitioners. The academics who facilitated the small group discussions recorded key points on **flipcharts**, visible to the participants, during discussions. Some of these were retained, and have been transcribed and used in this study. They were generated during a process in which practitioners engaged with openness, engagement, interest and creativity. They have been used to provide a source of concepts which allows direct access into practitioners' expression of their experiences, and some relational propositions.

The discussions of one group have been **tape recorded** and transcribed, and this record has been included in this study. This transcript captures the richness of discussion which underlies other exchange meetings , more briefly recorded

Table 3 Empirical Data Archive

The following table identifies the data used in the study. These were gathered over a period from 1995 to 2000.

Data Gathering Mechanism	Data Included in this study
Four initial field studies -	Field notes, company documentation from "Manufco" study. Cross case analysis results – Gibbon et al 1997.
Four Host Site Studies	Field notes, records of host presentations to ABM Exchange meetings.
Exchange meeting 1	Flip chart record Screening questionnaire – recorded in SPSS
Exchange Meeting 2	Flip chart record Screening questionnaire - recorded in SPSS Orienting questionnaire - recorded in SPSS Taped, transcribed discussion.
Exchange Meeting 3	Flip chart record Screening questionnaire- recorded in SPSS

	Orienting questionnaire - recorded in SPSS
Exchange Meeting 4	Flip chart record – experienced and participative group Orienting questionnaire - recorded in SPSS
Exchange Meeting 5	Flip chart record
Exchange Meeting 6	Flip chart record

4.4.3.2 Analytical Process

This is presented in two phases, to highlight the different activities which formed part of the process before and after “conscious” grounded theory building began.

First Phase – Prior to “Conscious” Grounded Theory Building

Since the start of the research process the focus of interest has been on the practical day to day activities of management accounting practitioners. Impetus for the first case investigations came from practitioners, who were seeking knowledge from others currently engaged in similar activities. The early, descriptive case records were subjected to a cross case analysis, which, with hindsight can be seen as a crude attempt at a grounded theory approach, in which a version of a conditional/ consequential matrix explored a pattern of implementation practices and organisational conditions.

1. Initial descriptive case research record, transcribed then triangulated with interviewees (Appendix 1).
2. Cross case analysis, identifying “patterns” (of implementation practices and organisational conditions), and some “concepts” (seeking to explain implementation experiences, concepts associated with features of this process).
3. Discussion of concepts, conditions, actions/ interactions, undertaken during first ABM Exchange meeting, at which it was clear that there were shared difficulties. Practitioners were keen to discuss these, and the findings from the cross case analysis resonated with their experiences.
4. Three further exchange meetings, discussions focussed around host site presentations of their practice, but no further conceptual development.

5. Analysis of field study data, theoretical sampling based on Rogers' (1995) innovation process model. The analysis identified "missing" steps, and was used to focus discussions at the fifth Exchange in Sheffield.
6. The fifth Exchange meeting in Sheffield focussed around stages in the Rogers' model.

After each data gathering exercise a form of coding occurred, during which some concepts were identified, and some attempted theoretical development, with hindsight this process can be seen as an intuitive attempt at grounded theory.

Revisiting this work with a perspective developed from Strauss and Corbin (1998), allowed its use as a part of the open coding process which underpins the theory building in this study.

A parallel strand of activity during this time was focussed on developing a sense-making perspective from which to examine the data. An attempt to use Giddens' structuration theory was useful, in that it was effectively part of what became the open coding phase of grounded theory building. The sensitivities developed from structuration increased the explicitness of the description and suggested questions to ask of the data.

Second Phase – "Conscious" Grounded Theory Building,

This phase of the analytical process has been the individual element of work, building on the team work which preceded it. It has included the following steps, though not necessarily in a sequential pattern:

1. Open coding

A set of concepts was developed from the records of Exchange discussions and the original cross case analysis. A sample is included as Appendix 2. During this coding process associated memos were recorded with the codes for use in other analytical

processes. Fifteen open coding documents were generated, and have been retained as an archive.

2. Axial Coding

This activity began during the open coding phase, (see category column, Appendix2) and was then further developed and tested during the later coding activities. All of the open codes were assembled and broadly categorised into paradigm elements – conditions, actions and consequences . An extract from the record of this activity is shown at Appendix 1. A single master axial coding document was generated, and used as the basis for the findings discussed in Chapter 5.

3. Selective Coding

The axial coding attempt lead to the development of an outline process framework, which was then used to classify the more detailed concepts developed during open coding. The analytical discussion which is recorded in Chapter 5 of this study is the result of the researcher's further development of classifications and the identification of salient properties and relationships with other elements of the process conceptualised in the framework.

4.5 Conclusion

This chapter has identified and explained the research approach adopted. This is an interpretive approach, adopting a qualitative method, grounded theory. This method is appropriate within the interpretivist epistemological paradigm, the research field, and the particular area of focus of this study. The approach taken to grounded theory development is based on that presented by Strauss and Corbin (1998) and adapted by the researcher for use in this study. The elements of this approach were outlined in general terms. This was followed by a description of the process as it was actually

conducted in this study. The findings from the individual research element which uses the data gathered by the team, with permission, are set out in Chapter 5, following.

Chapter 5 Findings

5.1 Introduction

The major findings of this study are a grounded theory framework of the process of ABT implementation which is presented at Figure 8 below, and identification of linkages between elements of the framework which are set out in Table 5. Together these two summarising vehicles encapsulate the results of the research process described in Chapter 4. They are proposed as a formulation of key concepts and interactions that portray ABM implementation as a process of organisational change, no claim is made that they are exhaustive. It is hoped that they represent useful additional knowledge for practitioners, relationships to prior literature is therefore discussed in Chapter 6.

Analysis of the data shown below in Table 4 – Grounded Theory Building Blocks - has been used to produce a theoretical framework which conceptualises the findings in terms of three central categories: institutional context, implementation conduct and consequences. The framework indicates action and structure elements of the change process and connections between them. These findings are then presented in the following sections:

5.2 Overview of the grounded theory framework

5.3 Elements of the grounded theory framework

5.3.1 Structural context

5.3.1.1 External

5.3.1.2 Organisational

5.3.1.3 Implementation Team

5.3.2 Implementation Conduct

5.3.2.1 Strategic Implementation Conduct

5.3.2.2 Routine Implementation Conduct

5.3.3 Consequences

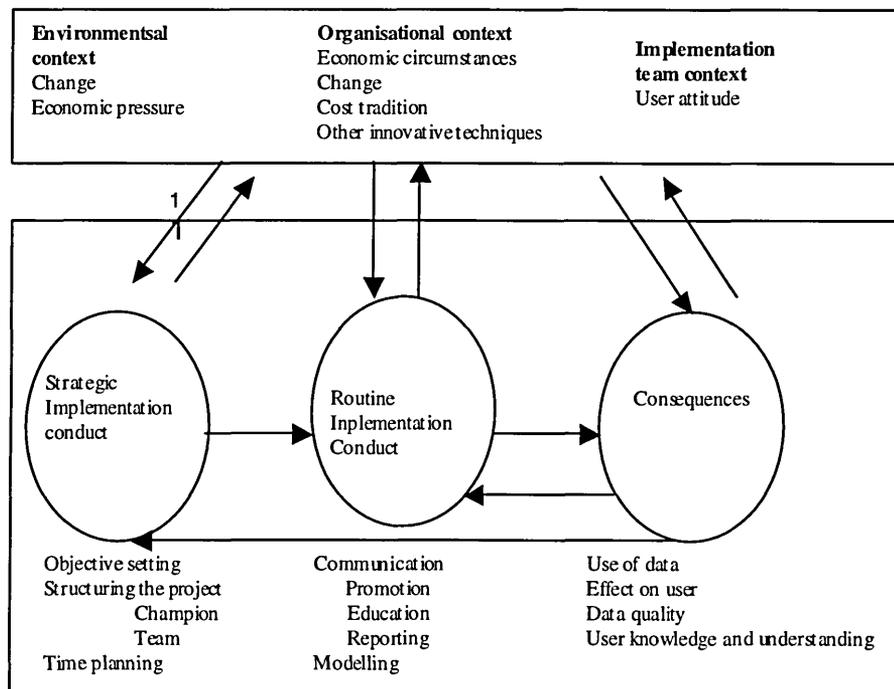
Table 4 ABM Implementation - Grounded Theory Building Blocks

Categories	Concepts	Data
Environmental conditions	Change Economic pressure	Initial field studies, E5, E6- facilitator's notes
Organisational conditions	Economic circumstances Change Cost tradition Other innovative techniques	Initial field studies, E2 transcript, Manufco, E4, E5 facilitator's notes
Implementation team conditions	User attitude	E2 transcript E4 Facilitator's notes
Strategic Implementation Conduct	Objective setting	Initial field studies, E1, E6 – facilitator's notes
	Staffing the project	E2-4 orienting questionnaires
	Time planning project activities	E2-4 orienting questionnaires
Routine Implementation conduct	Communication Promotion Education Information Modelling	Manufco field study, facilitator's notes E1 – E6
Consequences	Use of Data Effect on user Data quality User knowledge and understanding	E1 to E6 facilitator's notes, E2 transcript.

5.2 Overview of the Grounded Theory Framework Developed in this Study

The findings of this study are represented diagrammatically in Figure 8, below, which shows the grounded theory framework, its elements and the relationships between them. Each element of the framework is discussed in detail below. The grounded theory also identifies linkages between elements, which also feature in the discussion below, but which are summarised initially in Table 5. These linkages offer potentially useful heightened sensitivity for practitioners in their change management role.

Figure 8 Process of Organisational Change around ABM Implementation



Conduct during implementation process

Table 5 Linkages Between Elements of The Grounded Theory Framework

Element:	Linked To:
Environmental Context Change Economic Pressure	Objective setting Objective setting
Organisational Context Economic circumstances Change Cost tradition Other innovative techniques	User attitude, resourcing Model Building User attitude Resourcing, user attitude
Implementation Team Context User attitude	User responses
Strategic Implementation Conduct Objective Setting Novelty of objectives Stability Scope Definition Structuring the Project Appointment of champion Structuring Team Time Planning Project Activities Length of elapsed time	Change Change Structuring, resourcing, implementation team context Resourcing, communication, user reaction Team context, user response User response Promotion, user response
Routine Implementation Conduct Communication Model building	Time planning, team structure and user response Change, team structure, definition of objectives, resourcing.
Consequences Use of data Effect on user Data quality User knowledge and understanding	Communication and model building Objective setting, organisational context Model building and Communication Communication

5.3 ELEMENTS OF THE FRAMEWORK

5.3.1 STRUCTURAL CONTEXT

5.3.1.1 EXTERNAL CONTEXT

Salient environmental conditions had begun to be identified in the initial cross case analysis (Gibbon et al 1997). Data from facilitator’s notes at E5 and E6 have been

used to develop the analysis of this category. The two conditions which have been included in this category are change and economic pressure.

Change

The extra-organisational change referred to during Exchange discussions appeared to vary dimensionally in its causal connection to the introduction of ABM, and the degree of discretion available to the organisation in its response. “*Change in the market place*” and “*Spectre of the regulator*” illustrate two positions on a spectrum of choice (facilitator’s notes E6). ABM may be one of a range of options for organisational action, or an externally imposed action.

Economic Pressure

Economic pressure exerted from outside the organisation has also been identified as connected to the introduction of ABM “*pressure to improve results*” .

ORGANISATIONAL CONTEXT

Building from the initial field studies, this category has been developed using data from transcribed discussions at E2, the Manufco field data and facilitator’s notes from E4 and E5.

Economic Circumstances

This concept has been included based on facilitator’s notes from E4 in which “*growth*” was identified as a salient condition, which had a positive effect on the conduct of an implementation project by reducing the “*threat*” felt by users during the implementation process. In the same discussion group it was noted that the pursuit of growth as a priority was in conflict with ABM implementation.

Change

The degree of organisational change was identified as a salient condition in the initial cross case analysis and in the E5 facilitator’s notes. An extract from the E2 transcript

included as Figure 9 below indicates some of the effects of organisational change on the ABM implementation process.

Figure 9 E2 Transcript – Organisational Change

Processes are fundamentally the same. If the process changes rapidly, as quite often happens. Then the tasks that make up that process changes....

I would have thought for any meaningful ABM thing you must have stability in your processes. If you've got that rapid .

You have to aim your ABM model where there is stability of processes the higher up it goes the more stable the processes are going to be.

But if you've got that amount of change, anything that comes out, you're not going to do the true comparison.

Exactly. Yeah.

So possibly the timing of doing your ABM is not appropriate.

Yeah. Its both the timing and its where you pin the tail on the donkey, isn't it?

This conversation identifies the relationship between organisational change and the model building which is part of ABM implementation. There was quite a discussion on the level of use “*low level use*” This led to the development of a cross cut between model building and the degree of change/ flexibility which appeared to impact on any models’ ability to present a useful picture of current activity. “*The model can become abortive because it’s changing too quickly*” . This discussion was focussed on explaining the response of operational managers. Discussants identified situations where operational data is too fluid to usefully capture in a model “*things change so quickly and definitions are so woolly*”. Others identified examples of the other end of the dimensional range where there are longstanding, stable working practices “*hasn’t changed for the last 350 years*”. Therefore this condition has been included in the framework – working practices and their stability/ fluidity. The discussion made a link with operational managers’ use of the data. “*The lower the*

level you go the more flexibility there is in what they do". Therefore **managers' autonomy**, an authoritative resource issue, appeared to play a role here.

The E4 facilitator's notes added the identification of "*structural upheaval*" as a source of difficulty during implementation. . "*We tried to put it into somewhere which was changing and trying to put the stake in the ground was extremely difficult. The minute we put it in, two weeks later it changed. So if you started to say if this is it, this is what it looks like they might just go 'yeah, this is from this week, but what about where I was six months ago, you've not taken into account the benefits that I've made in those six months*". Change here has been linked to **model building**.

Cost Tradition

The meaning of cost and its significance in organisational life has been identified as a salient condition, "*cost control is far more important now than it has ever been in the past*" (E2 transcript).

Other Innovative Techniques

The salience of other innovative techniques adopted in the organisation was first identified in the initial cross case analysis. Subsequent coding of data (Manufco field study, E4 facilitator's notes) has been used to develop analysis around this concept.

At Manufco a climate of acceptance of ABM was in place as a result of the prior introduction of a kaizen approach to improving production operations. The introduction of kaizen had been undertaken with a guarantee of no job losses.

Other innovative techniques have also been referred to during Exchange discussions as causing ABM implementation problems (E4 facilitator's notes) "*initiative indigestion*".

Other innovative techniques have been conceptualised as varying dimensionally from “supportive of ABM implementation activities” to “detrimental to ABM implementation activities”. Variation along this spectrum has been related to the acceptance of prior initiatives and their number.

5.3.1.3 IMPLEMENTATION TEAM CONTEXT

This category has been developed using data from the E2 transcript and E4 facilitator’s notes,

User Attitude

This concept was identified from the E4 facilitator’s notes where “*the commitment of functional directors*” was identified as a supportive condition. Difficulties relating to user attitude were also referred to at this meeting, “*hidden agendas*”, “*political pressures to avoid allocations which rock the boat*” and “*lack of openness*”. Attitudes appeared to vary dimensionally from **supportive** of ABM implementation to **detrimental** to ABM implementation. An extract from the E2 transcript touched on the power of users to affect project outcomes, “*There can be some winners and a lot of losers*

Yeah. The problem is if those losers are politically in strong positions then your project is going to fail.”

5.3.2.1 STRATEGIC IMPLEMENTATION CONDUCT

CREATING CONDITIONS FOR ABM IMPLEMENTATION

Three sets of actions have been identified as influential on the conditions within which ABM implementation was taking place:

1. Setting objectives for ABM in the organisation.
2. Staffing the project.
3. Time planning of project activities.

Each set of actions has been analysed to identify salient properties and relationships with other elements of the process conceptualised in the framework.

OBJECTIVE SETTING

Initial work on this concept began with the first cross case analysis (Gibbon et al 1997a). The Exchange discussion data which has been coded into this concept was taken from facilitators' notes made at meetings 1 and 6 and the E2 transcript.

ABM Objectives

Participants at E1 and E6 provided their perceptions of the objectives being pursued in their organisations. This list has been classified along a continuum ranging between narrow technical objectives and broad objectives relating to user thinking as shown below in Table6.

Narrow, Technical	Producing Economic outcomes	Affecting User Behaviour	Affecting User Perceptions
Allocation of overheads to processes	To improve product pricing and profitability	Improved decision making	Opening minds
Estimating system	Eliminate waste	Managing cross functional processes	Ownership of numbers
Customer profitability	World class company	Process improvement Process speed	
Capacity modelling		Facilitation tool for other initiatives	
Regular reporting of ABM/ by processes AB budgeting		Improve ways of working	
Benchmarking across abm users		Drive time out	

ABM Objectives

The objectives pursued amongst these groups of discussants form the basis for identification of properties relating to the above classification. Properties have been divided into two sets, those relating to organisational conditions which seemed not to provide scope for discretion, and those which seemed subject to managerial choice.

Properties of objectives which connect to other process elements are shown in bold.

The connection is briefly explained immediately below, and the associated activities are further discussed within the appropriate process element section.

Objective properties - Organisational Conditions

Novelty

Objectives may be familiar within the organisational setting, or novel. Process management “*Managing cross functional processes*” is highly novel in many organisations. “*Improved decision making*”, “*improved product pricing and profitability*” “*estimating system*” are relatively familiar and form part of a widely accepted accountant’s sphere of activity. “*Customer profitability*” “*benchmarking across abm users*” and “*capacity modelling*” could be either, depending on the organisation. In BigBank a key focus was on process management, and one of the major difficulties faced by the team was connected with the unfamiliarity of this approach in that organisation. The novel process oriented cost reduction objective in Manufco, was unsupported by the legacy information system and therefore difficult to deliver. In Delivco and Infraco there was no private sector cost tradition, and this was part of the challenge for the teams there.

Unfamiliarity, cost tradition

These relate to organisational context.

Stability

Objectives may vary dimensionally from “stable” to “fluid”. Practitioners frequently referred to the occurrence of changing objectives as a condition within which implementation takes place.

Changing objectives

This has been related to the organisational context.

Objective Properties - Managerial Choice

Scope

The first cross case analysis (Gibbon et al 1997b) distinguished two approaches to objective setting amongst the four field study sites, a focussed small number of objectives and a wide ranging large number of objectives.

Some objectives are expressed as technical activities “Allocation of overheads to processes” “Regular reporting of ABM”. These may take place within the implementor’s sphere of influence, and are likely to be observable/ clear etc. “World class company” is a vague objective, far from implementor’s operational space.

Outcomes identified in Table 6 above as economic “Eliminate waste” “improve profitability” beg the question how? Steps in the process include information production, provision, absorption/ interpretation, action, outcome. Thus implementation team objectives are potentially distant in time and in “organisational space” which calls to mind issues of distancing (Giddens 1993). Objectives may need to travel across significant boundaries of organisational space. Objectives can be defined as early in the process therefore within **implementors operational space**, or further away, therefore less controllable by the implementor. Where implementors are seeking to affect the world beyond their operational space, the different strategies they adopt relate to this distance. Operational space has therefore been connected to the **Champion, team relationships and team membership**. When objectives

are “far away “ and “soft “ they may require knowledge/ skills which are outside the **implementor’s personal resources**.

Implementor’s operational space, implementor’s personal resources.

This connects to structuring the project (champion), and team context.

Definition

The discussion around objective setting at E2 included the following “*You’ve got to have a good set of firm objectives” “a good visible output to management”*, be “*clear from the outset what the business requirements were*”. This is responded to by another participant “*that’s ok if you’ve got the time to spend developing it.*” At E5 the need for “*clear objective at outset to drive model design*” was recorded and the record of E6 connects lack of objectives with difficulty. It seemed that lack of a clear objective/ objectives was seen as a problem by practitioners.

Objectives have been conceptualised along a continuum from relatively undefined to highly defined, taking examples from those provided above, from “*opening minds*” to “*allocating overheads to processes*”. “*Opening minds*” is an objective which is difficult to **observe** and therefore to **measure**, also to **articulate, unambiguously**. It relates to affecting attitude, feelings, thoughts, ways of thinking and seeing. It suggests freeing from a constraining world view, disconnecting from a prior set of assumptions. This may produce **risk** or **uncertainty**, connecting to the degree of comfort associated with the prior assumptions.

Observability and Measurability

These properties have been related to the ability to provide a cost benefit case for the implementation of ABM ,which in turn has been connected to resourcing the project, an activity discussed below as a strategic implementation activity.

Articulatability, ambiguity

These properties have been related to communication amongst the implementation team, and between the team and other groups in the organisation.

Riskiness, uncertainty

These properties have been related to user reaction.

Staffing the Project

Two aspects of project staffing have been identified as salient. Data is largely drawn from orienting questionnaires completed at E2- E4.

Appointment of Champion

Data relating to the identity and role of the champion are provided in Appendix 3. The graphs indicate that practice varies with regard to the champion. There are numerous instances of implementations occurring both with and without a champion. The E2 transcript of discussions around the champion and his role indicated a need for the role *“In the bank we had the best champion in the world because it was the managing director of the group and he championed it because he saw a real business need, a desperate one, and he rolled it out across the whole group.”* *“another example where the FD wasn't convinced so we were operating at a lower level in the organisation*

and that didn't work quite as well because we were fighting battles of resources and things and there wasn't the same push”.

The questionnaire data indicates champions' activities and has been analysed to identify the following salient properties of the champion:

Functional orientation – support for both finance and non finance, depending on the organisational circumstances. The E2 transcript indicated that this was an issue of concern to a number of participants as the following extracts show:

“that it shouldn't be seen as another finance system and therefore you need a champion from a non-finance discipline, ie operations, and we have been very successful in our pilot division to identify such a person, but we can see this is the key to the success of the actual implementation plan”

“We had the same problem in that we had our finance director pushing for this to be the costing system and not until we got another logistics director to champion it, has it been accepted by other people within the organisation.”.

Pattern of Commitment – discussions at E4 identified a need for a champion at the start of the project, and a need for a steady pattern of commitment.

Team Structure

The following properties have been identified during coding of data relating to team composition, provided in orienting questionnaires at E2-4, varying dimensionally amongst Exchange participants and field study sites, and conceptualised as conditions relating to implementation team context.

Autonomy- This concept was first identified during coding of the Manufco case study and was seen to be valid during all of the Exchange discussions, during which participants discussed many

issues over which they, as implementors, had discretion. Analysis using systematic comparison (Strauss and Corbin 1998, p 95) lead to the linkage of autonomy and the level of knowledge in the team, based on the notion that the exercise of autonomy is bounded by the level of practitioner knowledge within the team.

Size – teams vary in size.

Stability

Functional mix – *“If it’s seen as a project team that isn’t just finance people, sort of multi disciplined, then it’s literally located outside the finance department. That can help, because it’s not seen as something finance are doing to you.”* – E2 transcript.

Time commitment – there was evidence of both full time and part time commitment.

Expertise - Level of experience and training in project management and ABM – questionnaire results show variable practice in this respect.

Implementation team context has been linked to communication and user response.

Time Planning of Project Activities

This aspect of implementation activities was identified in the transcript of discussions at E2. A long elapsed time *“it’s slow”* was connected to negative user response *“a weakness in our pilot because there was such a prolonged gap...”*. Strategic action to shorten elapsed time was identified as beneficial *“A result on the table ...can generate enthusiasm and drive”*. This view was supported at E3, where the facilitator’s notes recorded a view that the timescale of deliverables should be kept as short as possible, and at E6 where *“quick wins”* were identified as useful. This has been linked to the communication activity of promoting the project.

5.3.2.2 ROUTINE IMPLEMENTATION CONDUCT

ABM IMPLEMENTATION ACTIONS

2 sets of actions have been identified in the data as routine ABM implementation activities :

4. Communication.
5. Model building.

Each set of actions has been analysed to identify salient properties and relationships with other elements of the process conceptualised in the framework.

Communication

Interaction between implementing practitioners and users was identified as a salient concept during the earliest coding, of the Manufco field notes. Three distinct elements of communication have since been identified, using data from E2, 3 and 5.

Promotion

Education

Reporting

Promotion

Practitioners identified promotional activities as part of the implementation process, and raised them in discussions seeking to identify good practice. In the E2 transcript the following related comments are recorded - *“Your biggest problem is selling it to people”, “You’ve got to be careful you don’t sell it as a day to day task management tool”, “ride on the back of another initiative”*. The facilitator’s notes at E3 recorded advice to *“make it the customer’s”* and to pay attention to *“expectation management”*. Naming the project was recorded as influential, and *“have a logo”* was recommended.

At E5 when the group was seeking to identify good practice promotional activities were again identified “*publicise achieved efficiencies*”, “*demonstrate benefits*”.

During discussions around these it appeared that there was a wide variation amongst participants relating to the attention given to these issues, and implementors were acting with a high degree of autonomy. Links which have been made between this element of the framework and others are to time planning, user attitude, and user response.

Education

User education was identified in the E2 transcript data

Participants comments included the following examples:

“And we recognise that we have to push them into understanding how they can use it and what it's telling them because even our finance people don't necessarily know what it's telling them.”

“Because these systems are so rich with information but so dangerous they don't understand what it is they've got in front of them.”

“We have a change management programme which everybody on the site has six days training and we tag onto the back of that within the change management programme, everybody got process analysis, education and we just tagged it onto the back. Made people aware of it that way and then I spent six months actually going round all the managers involved in the pilot actually sitting down and explaining to them, that was the hardest bit actually.”

“it's been an opportunity to go around and speak to every single manager and executive and all our general managers just to tell them what we've been doing. What activity based costing was, what the benefits would be”

“I've developed a presentation and by the end of the six months I could say it backwards. But it's something that you've got to go through to get there and it's really slow and frustrating.”

These examples illustrate the need for education as part of implementation, its wide ranging and time consuming nature. This activity has been linked to user knowledge and understanding as an outcome.

Reporting

This element of communication refers to the provision of new ABM information.

Again, the discussion at E2 has been used to identify salient concepts relating to this activity.

“I think that's almost inevitable because if you ask somebody what they want they'll say I don't know really. If you give them some suggestions they say Yeah I'll have that'. So you've got to almost give some suggestions and then you get the feedback.”

“This is where I think we're pushing rather than pulling. We're putting a suite of reports there to be available recognising that we can't perhaps do the conversion of everybody first time”

Designing and producing reports is a significant activity within implementation which appears to offer the implementors a high degree of autonomy and illustrate the effect of implementor experience as an influencing condition. Reports are being designed iteratively here – based on initial suggestions leading to dialogue with users, an interactive process. The predicted user responses are anticipated conditions, and intended implementation actions are reflexively designed in the light of these. Again there is a link to user response and to implementor expertise as part of team structure.

Model Building

Model building as an implementation activity is referred to in a number of the Exchange meetings. The facilitator's records from E5 have been used to generate a number of concepts which participants had experienced as difficulties relating to model building. Model design, the approach to the representation of reality, a trade off between cost and accuracy and a relationship to some purpose were identified at E5. At E2 discussion of model building lead one participant to identify a situation where operational data is too fluid to usefully capture in a model "*things change so quickly and definitions are so woolly*". Others identified examples of the other end of the dimensional range where there are longstanding, stable working practices "*hasn't changed for the last 350 years*". At E3 participants identified a need for forecasting capability to support modelling on this context "*futurology*" was the name given. Once the model has been designed, populating it with data was also identified as a challenge "*where's the data and how to get it*" (E3). Modelling has therefore been linked to context, objective definition and resourcing.

5.3.3 CONSEQUENCES

Consequences of implementation activities were discussed at all of the Exchange meetings, facilitators' notes and the E2 transcript have been used in the coding of data to this category to four elements:

Use of data

Effect on user

Data quality

User knowledge and understanding

Use of data

A single concept has been used to capture the intended outcome which was identified in the data. This is the use of data by users beyond the implementation team,

“somebody going to use what comes out the other end and not just put it on a shelf to gather dust”. This is a required outcome – involving user actions, identifying a dimensional range of possibilities from use to dust gathering. The practitioner matched one of the tests of project “success” in the literature (for example Malmi 1997), *“If they use it, that's good information”*. The discussion around this issue was lively and free-flowing, *“It's getting the management themselves to do this and to act upon it. It's very easy for everyone of us here to do an ABC exercise and it stays there, but rolling it out into the rest of the business requires the management of it. It is not going to go very far unless you get the management bought into it and using it.”*

“not only to the costing manager and his team who actually run the system, but also with the ops manager who has constructed ABB based on the ABC”

This comment has been used to identify that the dimensional range of reach applied here, and the idea that more and less accessible user groups are salient. Consideration of the matters affecting this required outcome lead to the identification of the three further related outcomes.

Effect on user

Practitioners recognised that users' actions were influenced by the expected effect on themselves:

“They'll use it if it benefits them”, *“don't use it because some of the time it's telling them the wrong message and they're not willing to accept it”*

User acceptance depended on the nature of “message”, groups who were disadvantaged by data for example in negotiating overheads – would not use it, so that

the user response was conceptualised as mediated by communication (education) and the nature of the information (the model).

Data Quality

Users were also influenced in their response by issues relating to data quality,

“they question the data then....That gives us a headache really”

“Because they can't see the way the data has been constructed, right down to its source”

“Unless they can get right down to that little detail, and know somehow how we've configured it they just don't accept it”

” the important thing is that you've got this visibility to see how it's done or a system that you say, well if you don't like what you see, then some of it's down to information we've been provided with and you've got to tackle it at source”

The need for transparency identified at E5, was supported by these comments from the E2 transcript, but clearly is not delivered. The second discussant was giving an example of how visibility is used by implementers to support dialogue with users. The degree of user involvement was identified as pertinent here, and was a property of data construction and data validation.

There was quite a bit of talk about visibility at E2, another comment which has been connected to model building *“Visibility is the bit we've majored on so that the drill down facility is very good and hopefully it will not give much of a problem”*.

Resourcing has been connected to the ability to provide information to assist visibility to users. *“It's a resourcing problem”*.

User knowledge and understanding

Practitioners at E2 made the following comments which relate to this outcome and its effect *“Every time you answer a question, you get three more questions and the problem with the system is making it almost too much for what it was designed to do”*

Another practitioner identified users trying to use it *“beyond where it was intended to be used”*.

Users’ knowledge and understanding and its effect on their use of data has also been identified in the following comments *“people running off with a unit cost that isn’t what it seems “, “these systems are so rich with information but so dangerous they don’t understand what they’ve got in front of them”*. This has been connected to communication (education).

5.4 Conclusion

This completes the description of the grounded theory which has been developed in this study. The framework presented in Figure 8 (p. 65), and the relationships in Table 5 (p. 66) which were then explicated in the text which follows are offered as a contribution to the management accounting change literature in general, and the ABT implementation literature in particular. Relationships between these findings and parts of both of these literatures are discussed in Chapter 6. The driving force behind this study has been to generate knowledge which would be of use to practitioners, the focus of the discussion in Chapter 6 is therefore around this aspect.

Chapter 6 Discussion

6.1 Introduction

This chapter begins by examining the relationship between the prior literature of management accounting change (Chapter 2) and Activity Based Techniques implementation (Chapter 3) and the grounded theory process model developed in this study. It goes on to identify features and limitations of the grounded theory model, and to critically appraise the research process.

6.2 Comparison with normative models of ABT Implementation

The ABT literature has been classified in Chapter 3 into normative models of ABT implementation, and empirical implementation studies. Correspondence between each of the normative models of ABM implementation discussed in Chapter 3 and the constructs developed in this study are identified in Table7 and discussed below. This section concludes with the identification of three major differentiating features between the normative models and the findings from this study.

Table 7 Comparison of Findings with normative implementation advice.

Categories This study	This Study	Kaplan and Cooper	Turney
Environmental conditions	Change Economic pressure		
Organisational conditions	Economic circumstances Change Other innovative techniques Cost tradition		
Implementation team conditions	User attitude		
Strategic Implementation Conduct	Objective setting Staffing the project Time Planning	need to experiment and learn in order to: structure for their own managerial purposes.	Formulate objectives, Set the scope Identify team membership Complete a project schedule Budget the Costs
Routine Implementation conduct	Communication Promotion Education Information Modelling	Need for managerial understanding explore the structure of feedback provided to employees for learning and improvement activities solve technical measurement issues. Identify activities, costs, products/ services/ drivers and cost drivers	Describe deliverables Convince management that ABC should be introduced Determine training requirements Train the users Create useful reports Distribute the ABC information Describe the organization structure Collect data Design ABC Model Update the ABC model
Consequences	Use of Data Data quality Effect on user User knowledge and understanding		Manage use of ABC information

Comparison with Kaplan and Cooper (1997) is focussed on the implementation oriented aspects of their work which addressed technical issues, and included no material about the social dimensions of any of the stages, nor of migration. However, the main elements of their proposed approach can be seen to match constructs generated in this study. In the first place, the model derived in this study reflects the importance of the need for managerial understanding in Kaplan and Cooper's work, in the communication element of routine implementation conduct. Promotion and education activities are conceptualised within this element, and linked to the consequences of user attitude and user response. It also corresponds with Kaplan and Cooper's normative model in its approach to meeting organisational needs by objective setting, measurement within the modelling activity and reporting as part of the communication activity. The technical tasks underpinning the ABC system (identification of activities, costs, products/ services/ drivers and cost drivers) are present in this study within the activity identified as "modelling" though they are not discussed individually in detail. The model in this study therefore, corresponds with Kaplan and Cooper's implementation activities, indicating correspondence between the theory which they have developed by working with practitioners and the practical concerns of the practitioners participating in this study.

Turney's work is more focussed on steps involved in the implementation process, comparison with the framework in this study is therefore more direct. Again the majority of the activities identified as elements of the implementation process by Turney have also been identified in this study.

Argyris and Kaplan's sequence of activities also displays some correspondence with this study. However, the final two elements "align incentives" and "overcome

barriers” have no directly matching constructs in the findings from this study. These were suggested by Argyris and Kaplan as activities to deal with the “serious organisational problems” which were argued to result from unforeseen consequences, which may be embarrassing or threatening and undermine implementation. This element of the “ideal” process seems to be missing from the framework in this study, indicating that theory extends beyond practice in this respect.

There is a high level of correspondence between implementation conduct constructs developed in this study, and those in the normative models examined above, so that the framework addresses conduct which would be deemed appropriate from an “ideal” theoretical perspective. This study is, however, differentiated from the “ideal” literature in three major respects. In the first place its focus is on exploration of experiences of difficulty in practice, and the constructs are discussed from this perspective in Chapter 5. The construct “objective setting”, for example, is identified in the normative models and in this study. Its development in this study has extended to the identification of salient properties and dimensions of objectives, and their relationships to other elements of the framework.

Secondly, the correspondence between the constructs developed in this study, and those appearing in the normative literature is confined to the implementation conduct and consequences elements of the framework. Whilst the normative literature acknowledges the importance of a sensitivity to context for the detailed design of implementation activities, it does not systematically identify and relate salient features of the context to implementation activities.

Finally, the implementation process model developed in this study is an iterative and interactive, rather than the sequential approach presented in the normative literature. The “ideal” theoretical approach, in this respect, presents a simplified process, which

corresponds with practice in many individual elements, but does not address issues arising from a reality which is more complex.

6. 3 Relationship to empirical studies of ABT implementation experiences

Correspondence between the empirical studies of ABM implementation discussed in Chapter 3 and the constructs developed in this study is discussed below. The discussion opens with an examination of the correspondence with Anderson and Young's study which has then been used as a basis for exploration of the other empirical studies described in Chapter 3.

6.3.1 Anderson and Young 1999

The focus of this study was an exploration of relationships between “variables implicated in project outcomes” and measures of outcome. It proposed a structural model of ABC implementation. This discussion firstly considers the relationship between the variables identified by Anderson and Young and elements of the framework developed in this study. It goes on to examine the relationship between Anderson and Young's structural model and the framework model developed in this study.

The variables were classified by Anderson and Young into “context” and “process” factors, and their discussion and analysis addresses each group in relation to outcomes which corresponds with the sets of context and conduct constructs developed in this study. The incorporation of relationships with outcome measures in Anderson and Young's study corresponds with the consequences element of the framework developed in this study so that at a macro level the overall correspondence between these two perspectives on ABT implementation is high. Differences at more detailed levels of analysis are identified below.

Two groups of factors which were identified by Anderson and Young, have not been identified in this study. In the first place they identified a set of contextual factors relating to individual actor's characteristics, which have been used in the analysis of questionnaire responses to explain respondents' view of outcomes. This study has not identified individual level contextual factors, team context being the lowest unit of analysis. Secondly they identified the internal functioning of the project team as part of the process. Whilst staffing the team this has been included as an element of strategic implementation conduct in the findings from this study, team internal functioning has not been identified as a construct from the data.

Table 8 below compares the remaining Anderson and Young variables with the framework developed in this study.

Table 8 Comparison of This Study with Anderson and Young (modified)

Categories This study	This Study	Anderson and Young
Environmental conditions	Change Economic pressure	Heterogeneity of Demands Competition Environmental uncertainty Likelihood of layoffs Growth opportunities Labour relations Importance of site to company External communications/ external experts
Organisational conditions	Economic circumstances Change Other innovative techniques Cost tradition	Compatibility with existing systems Centralisation Functional Specialisation Formalisation/ job standardisation Vertical differentiation Internal Communications Extrinsic reward systems ABC training investments Relative improvements over existing systems (accuracy and timeliness) Relevance to firm's decisions and compatibility with firm strategy
Implementation team conditions	User attitude	Formal support in accounting function Support Top management Local Management Local Union
Strategic Implementation Conduct	Objective setting Staffing the project Time Planning	Top management support Resource adequacy Availability of ABC Software
Routine Implementation conduct	Communication Promotion Education Information Modelling	
Consequences	Use of Data Data quality Effect on user User knowledge and understanding	Outcome measures: Overall Use of data Accuracy

The comparison shows that each major element of the context identified in this study corresponds with Anderson and Young's work. At a more detailed level the concepts within environmental context are broadly consonant. At the organisational level the set of variables derived from prior literature corresponds poorly with the findings from this study. It seems that salient factors from a practitioner perspective relate more to "macro" organisational features, than to the more "micro" factors in the prior literature. These "micro factors" might be characterised as organisational design archetypes and sub systems following Laughlin's (1991) schema, which seem to have predominated in prior studies in this area. This is an interesting misalignment of concerns, have the academic studies in this area been too narrowly focussed? Or are practitioners not inclined to perceive and question institutionalised organisational practices "the way we do things round here"? Finally at the implementation team context level, the relationship with users appears as salient in this study and in the prior literature.

The conduct elements derived from this study are less well matched in Anderson and Young's review. Whilst they argue that prior "process" studies connect conduct and outcome, they seem to throw little light on what conduct comprises. The major activity constructs developed in this study (objective setting, communication and modelling) are not identified as "implicated in outcomes" at all by Anderson and Young. Once again this seems to indicate a mismatch between prior academic studies and practitioner concerns. Anderson and Young's findings in relation to influences on outcomes did not therefore capture the links between implementation activities and outcomes, which are developed in this study.

The structural model proposed by Anderson and Young is similar to the one developed in this study in that it relates context, process and outcomes. It differs in

that the effects it proposed are uni-directional, context was conceptualised as influential on process and outcome, and process on outcome, however the iterative effects of outcomes and process on the other elements were not included.

To summarise this section, the implementation process model developed in this study corresponds, at a macro level with the model proposed by Anderson and Young, and the variables within it. This study has not lead to the development of constructs relating to individual and intra-team issues which were identified by Anderson and Young, which has been included in the concluding chapter as a possible area for further study.

The three respects in which this study does not match Anderson and Young's analysis were as follows:

- Identification of salient organisational contextual features.

Environmental and team level contextual factors are similar, but salient organisational context features in the prior literature were “micro” features whereas this study indicates practitioner concern with “macro” features.

- Implementation conduct linked to outcomes

Constructs relating to implementation conduct which have been identified as salient in this study are not included in Anderson and Young's investigation, so that links between conduct and outcomes were not investigated.

- Dynamic model

Finally, the structural model proposed by Anderson and Young was uni-directional and static.

Comparison with other prior studies is focussed on these three issues.

6.3.2 Organisational Context

This study has indicated practitioner identification of salient organisational contextual features as shown in Table 9 below. Comparison with the findings of Anderson and Young has suggested that prior literature has not included these features in studies of ABM implementation which prompted an examination of the other studies reviewed in Chapter 3 to identify their findings in this matter.

Table 9 Organisational Context Features in Other Prior Literature

Category	Concept not in Anderson and Young	Instance in Prior Literature
Organisational conditions	Economic circumstances Change Other innovative techniques	Resources? Cobb et al 1992 Friedman and Lyne 1999

The survey findings of Cobb et al (1992) identified “other changes higher priority” as one of the top problems experienced in practice, but does not go further in illuminating this point. Friedman and Lyne’s (1999) case based study argued for “sensitivity to links with other initiatives” based on their exploration of factors leading to success and failure. It may be argued that the many references to “resources” as an influential factor are related to “economic circumstances”. There is therefore some discussion of these constructs in the literature, and their relationship to conduct and outcomes is recognised. Their identification as constructs in this study is therefore consonant with prior literature.

6.3.3 Implementation Conduct Linked to Outcomes

A set of fundamental implementation steps was presented by Cooper et al 1992, but they were not related to context, nor were practical difficulties investigated. Innes and Norris (1997) identified links between the implementation activities of “education” and “design of system for purpose” and the eventual acceptance and usage of the system. These two activities correspond to a degree with the education and modelling

elements found in this study. Again these constructs are consonant with elements of prior literature.

6.3.3 Dynamic Model

The prior ABT implementation literature reviewed in Chapter 3 did not offer a dynamic model of the type developed here, although Innes and Norris went some way towards it by identifying links between specific implementation activities and beneficial outcomes, and Friedman and Lyne argued that influencing factors were interrelated. There has not been an empirically grounded dynamic model presented in this literature as yet. In this respect this study extends prior literature.

6.4 Conclusion in relation to ABM Implementation Literature

Comparison with prior ABT implementation literature has produced some interesting insights and questions. There is correspondence between the prior normative and empirical literature and the constructs developed in this study. Differentiating features of this study in relation to normative literature are its detailed exploration of difficult aspects of implementation practice, its inclusion of explicit relationships with contextual features and its dynamic character. Prior empirical studies also provide support for constructs developed in this study, but it provides a novel, systematically developed synthesis of context, process and outcomes in which the activities of practitioners are explicitly identified and discussed. Its exploration of implementation conduct, in particular with respect to objective setting extends prior literature by relating it to context and outcomes.

6.5 Discussion in Relation to Change Process Models

The discussion which follows compares the set of constructs developed in this study to the conceptual models of change presented in Chapter 2. The foci of the change

process literature considered here are three models conceptualising complexity, Laughlin (1991) and Burns and Scapens (2000) and Rogers (1995).

6.5.1 Laughlin 1991

Laughlin's skeletal change models have been used to examine the grounded theory model developed in this study, to identify what emerges from joining them to empirical flesh (Laughlin1995). Laughlin's framework contains high level context and outcome concepts and proposes a discrete linear change process, whilst this study contains detailed context and action concepts in a complex interrelated iterative pattern. The difference in level was to be expected given Laughlin's model was proposed as a "skeletal" framework, which would be extended and developed by the addition of empirical flesh. In the study by Richardson et al (1996) Laughlin's model was used to gain insight into the change pathway followed in a case organisation, which was found to be a form of colonisation since it affected all three of Laughlin's organisational levels. Using it in similar way to examine the findings in this study it seems that ABT implementation can involve attempted change to all three organisational levels identified by Laughlin. The sub system and design archetype elements are clearly present in any such project, interpretive scheme level changes are visible in the objective setting and communication elements of the framework. Objective setting was conceptualised in this study as varying dimensionally from narrowly to broadly defined, and at the broadly defined end of this continuum the objectives seem to relate to change in interpretive schemes (see Table 6 Chapter 5, "opening minds").

Following Laughlin's analytical framework, as in Richardson et al (1996) it is therefore possible to identify possible change pathways associated with ABM implementation. Where attempts are being made to affect interpretive schemes,

practitioners are involved in second order change processes of colonisation or evolution. Laughlin argued that evolution, based on shared understandings was relatively rare, and that colonisation, the driving through of change by a powerful group, was most likely to bring about second order change affecting all levels.

The grounded theory model identifies features of practice which indicate aspects of both of these pathways as present in practice, and introduces the possibility of a “third way” second order change involving a combination of both colonisation and evolution, “evolutionary colonisation”. Colonisation aspects can be identified as supported and enabled through the activities of the *champion* in the grounded theory, and evolutionary activities identified in the *communication* element of the model. The participants in this study were from large organisations, and this may explain the difference in findings between this study and Richardson et al’s study, which was of a small organisation, in which a single pathway was apparent. Analysis of the grounded theory in this way seems to indicate that in larger organisations elements of more than one of Laughlin’s pathways may be present during ABT implementation.

Practitioners can therefore be active participants in both colonisation and evolution during ABT implementation, and it seems likely that in large, complex organisations they will be involved in a combination of both, “evolutionary colonisation”. Practical measures to support and enable such an approach include the activities of the champion, and the communication activities of practitioners.

With regard to Laughlin’s “an environmental jolt”, environmental influences were found to be salient, but their character appeared to vary between a chronic ongoing pressure and a single more concentrated influence (“spectre of the regulator”), which might be described as a jolt. The findings about change as part of the organizational context show that for some organizations “balance” is not a description of their state

at any time, and more than one change process is underway at any time. The two models share the concept of environmental influence, which in this study has been developed to include more properties and dimensions based on the empirical data. Examination of the grounded theory alongside Laughlin's (1991) change models has allowed the development of insights into the likely change pathways being followed during ABT implementation, and the proposal of a new pathway "evolutionary colonisation". The concept of environmental disturbance is supported by the grounded theory, and its properties and dimensions developed (Chapter 5). This study adds empirical flesh by identifying action constructs to elaborate the context and outcome constructs proposed by Laughlin. Examination of the grounded theory from this perspective indicates a need for practitioners to be conscious of the organisation level they are attempting to affect.

6.5.2 Burns and Scapens 2000

Burns and Scapens proposed their conceptual model as a set of analytical tools for use in interpretive case studies of change processes, which they argued would need to be thoroughly contextualised and based on the observation of action. It was therefore developed to be used with empirical findings, though findings generated from a different method than the one used in this study which is pan-organisational rather than single case based. However its focus on action and action/ structure relationships is consonant with Burns and Scapens' model which includes action constructs in a complex iterative relationship with contextual elements. This study identifies detailed elements of practice in a specific change process, ABT implementation, and salient structural elements, and elaborates the theoretical constructs in Burns and Scapens' model as discussed below.

Burns and Scapens' model conceptualised structure as a set of rules and routines and proposed relationships with four types of action, encoding, enacting, reproduction and institutionalization. These were differentiated on the basis of relationships between elements of their framework. The correspondence between these four concepts and elements of this study is now discussed. "Encoding" related the relationship of new rules and routines with prior institutional routines. In this study encoding could be used to describe the introduction of ABT, since it is represented as related to prior contextual conditions "*cost tradition*" and "*other innovative techniques*".

"Enacting" expressed a relationship where rules and routines and modified action, which Burns and Scapens argued could be conscious or unconscious. The set of consciously novel implementation actions ("*strategic and routine implementation conduct*") identified in this study have been related to salient contextual conditions and each other, so that they correspond with the enacting concept. The practitioners taking part in this study were engaged in a process of reflexively monitoring their actions, which Burns and Scapens suggested would be a feature of this activity. The consequence "*use of data*" could also be classified as enactment since this would be novel, and is similarly related to contextual and other action elements of the framework.

Over time "*use of data*" would arguably become Burns and Scapens' "reproduction", the repetition of similar actions, and eventually "institutionalization" where they become "taken for granted behaviour". This study offers some insights into the operation of this process in its discussion of relationships between "*use of data*" the implementation activities of "*communication*", "*model building*" and "*user knowledge and understanding*". Burns and Scapens' suggestion that lack of understanding was implicated in unintended reproduction actions is consonant with

the findings of this study which identifies “*user knowledge and understanding*” as a problematic outcome of the implementation process.

Their final concept of the four, institutionalization, deals with change occurring in the institutional realm, rules and routines becoming thoroughly embedded in organizational practice. The framework developed in this study identifies relationships between “*implementation activity*” and “*consequences*”, however it does not extend to concepts which are readily identifiable with institutionalization. It seems likely that this reflects the grounding of the study in experiences of implementations in progress, rather than having reached any sort of conclusion. The four action concepts in Burns and Scapens’ model are therefore empirically supported by this study, which offers insight into their manifestation in ABT implementation and evidence that practitioners have some awareness of them. It is noted however that of the four, institutionalization is least elaborated. Conversely the correspondence between the models in this respect means that the grounded theory seems in turn to be supported.

There is a further discernable correspondence in relation to Burns and Scapens’ three dichotomies, which they argued would offer further insights into change processes. These identified properties of the change process whose dimensional variations were connected with the level of difficulty of such processes. Two of these dichotomies resonate with the findings from this study relating to the properties and dimensions of “*objective setting*”, a strategic implementation activity. The first dichotomy was formal versus informal change, where formal change was argued to be more achievable, but informal change would be necessary for complete implementation. This seems to correspond with the dimensional variations in “*Scope*”, a property of “*objective setting*” which this study has argued varied dimensionally from “*narrow*

technical” (formal) to “*affecting user perceptions*” (informal). There is complementarity between the two approaches, in that this study has identified this dichotomy in practice, and Burns and Scapens’ argument suggests an explanation for difficulty in practice when setting out to produce informal change.

The second dichotomy was evolutionary versus revolutionary change. This seems to correspond with the dimensional variations in “*novelty*” identified in this study as a property of “*objective setting*”. Again, the two approaches seem complementary, the empirical findings supporting the theoretical concept, and the prior theory suggesting an explanation for difficulty in practice.

The third dichotomy, regressive versus progressive change, is identifiable in this study in the “*consequence*” “*effect on user*” in which the salience of user interests was identified. There is less data in this area than the previous two, so that these concepts are less developed, practitioner discussions having had relatively little to offer with regard to issues of power.

In summary, the complexity of the process presented by Burns and Scapens has been identified in the grounded theory. This study therefore provides empirical evidence of the general shape of the model, and empirically founded elaboration of detail in respect to action categories and dichotomies. The grounded theory is relatively undeveloped in relation to mature implementation practices and issues of power, which will be taken up in the discussion below.

6.5.3 Diffusion Theory

The elements of model developed in this study are compared with the innovation process model developed in this tradition (Rogers 1995) in Table 10 below. To begin with overall features an important distinction to be made is that the diffusion model is static and linear, in contrast to the dynamic process model developed in this study.

It is an activity model, which makes comparison with the action elements of this study possible. Whilst separate “action” and “structure” concepts are not identified by Rogers, the actions in the diffusion model are expressed as interactions between the organisation and the innovation. This means that some of the contextual constructs in this study do resonate with Rogers’ model.

Table 10 below illustrates some of the more detailed differences and similarities.

Rogers’ model includes pre-adoption activities, which are not present in the model developed in this study. Rogers’ implementation activities are expressed at a higher conceptual level than the activities in this study, but the two seem consonant. Finally, Rogers model is on an organisation level only, whereas the model in this study includes organisational, sub-organisational and individual components.

Table 10 Comparison of This Study with Rogers’(1995) Innovation Process Model

This Study		Diffusion Innovation Process model
Categories	Concepts	
		Actions prior to adoption - initiation, agenda setting and matching.
Environmental conditions	Change Economic pressure	Identified as influential on innovation decision
Organisational conditions	Economic circumstances Change Cost tradition Other innovative techniques	Included in relation to implementation activities
Implementation team conditions	User attitude	
Strategic Implementation Conduct	Objective setting Staffing the project	Implementation Activities: Clarifying
Routine Implementation conduct	Communication Promotion Education Information Modelling	Restructuring

Consequences	Use of Data Effect on user Data quality User knowledge and understanding	Routinising
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6.6 Features and Limitations of the Grounded Theory Model

The above discussion has examined the grounded theory model developed in this study from a range of perspectives, and has allowed the identification of features and limitations of the model as follows. The model provides a practitioner perspective which has been shown to be broadly consonant with prior literature. It is a complex iterative and dynamic model, which identifies detailed action and structure constructs and relationships between them. It extends both the normative and empirical literature of ABT implementation, and provides some empirically based elaboration of the conceptual change process models considered here.

It is expressed in everyday language and at a lower level of abstraction than the conceptual models, in particular the sociologically based ones. In this respect it is more readily accessible to practitioners, and as would be expected, more resonant with their everyday concerns. It is pan-organisational, therefore the contextual constructs are identified at a higher level of abstraction than the action constructs.

It is interesting to consider the areas which have not emerged as part of the grounded theory, but which do feature in the prior literature. In the first place the organisation structure factors identified by Anderson and Young (1999) have not been identified as salient in this study. Two explanations are possible, either these matters are not salient or practitioners are unconscious of their role as they are part of the “taken for granted” context. This illustrates a limitation of the model which, being grounded in practitioner accounts, is to an extent bounded by their discursive knowledge (Giddens 1984).

Political considerations are largely absent from the grounded theory. Given the role that they play in the prior literature this seems to be a weakness in the grounded theory which is connected to the data gathering method and the pan-organisational approach. The data for this study was drawn from records of discussions amongst groups of practitioners from different organisations, a setting in which sensitive political issues would be unlikely to emerge. Also it seems likely that such issues would be highly context specific, which again would mean they would not emerge in this forum.

The grounded theory model addresses only some of the whole set of activities which are identified in the prior literature. It does not contain any elements of the pre-implementation activities identified in the Rogers (1995) model, and is relatively undeveloped in relation to the later implementation activities. This can be explained in relation to the source of the data which was practitioners engaged in the early stages of implementation as shown by attendance questionnaires. The focus of their discussions was on current concerns and did not revisit the adoption decision process which had already taken place.

In summary the prior literature and the grounded theory developed in this study are generally supportive of each other. The grounded theory identifies areas where practitioner perceptions do not correspond with prior literature, and the prior literature indicates some boundaries of the grounded theory. The imperfect correspondence between the two is an indication of the novelty of the grounded theory.

6.7 Critique of Research Process

In common with all grounded theory studies the question of the relationship with prior theory must arise, to what extent can the grounded theory be said to be derivative?

This method of theory development explicitly utilises the interpretive sensitivities of

the researcher, which are necessarily informed to an extent by prior theory. However, the intrusion of prior theory between researcher and data has been consciously guarded against by the following of a rigorous and transparent method of theory building (Strauss and Corbin 1998). Whilst this cannot guarantee freedom from researcher bias and derivativeness, the differences identified between prior theory and the grounded theory developed in this study suggest that it has been at least partially successful.

The process of grounded theory building has been extremely time-consuming. The volume and complexity of the data which was available for analysis was far in excess of that which has been included so far. It would be possible to develop and enrich the theory by the inclusion of field study data, which has not as yet been incorporated. This time pressure was exacerbated by the early phase of uncertainty when, without *a priori* hypotheses to test and established protocol to follow, a rather tentative progress was made. Grounded theory research requires confidence, creativity and experience (both of doing research and of the context(s) being researched) are of great benefit. The process was therefore difficult at times when these qualities were in short supply! The data gathering approach was designed to balance the requirements of ABM Exchange participants and the research process, with inevitable compromises as a result. It became clear during the coding process that the transcript of conversations at E2 was a rich source of concepts and underlying elaboration, and further such data would have been useful. Data collection has however been undertaken using a variety of methods, and on several occasions, triangulating and providing multiple perspectives, supplying more information on emerging concepts and yielding stronger substantiation of constructs.

The research has benefited from the openness, engagement, interest and creativity shown by practitioners involved in the ABM Exchange. They have provided a source of concepts which allows direct access into practitioners' expression of their experiences, and some emerging propositions. Since the data in the study is largely drawn from practitioner accounts it is more plentiful where it relates to conditions in their direct experience, and relatively weak on organisational context.

6.8 Conclusion

The comparison of the grounded theory with the prior literatures of change and ABT implementation prior has led to the identification of correspondences and differences which are illuminating in identifying some boundaries of the prior work and this study. There are correspondences with all of the elements of prior literature examined here and the grounded theory, but the grounded theory extends, in some respects beyond each of them, indicating potentially useful areas for further research. The grounded theory, whilst open to critique, as set out above, appears to present a reasonably valid picture of aspects of ABT implementation, and provides insights into the process which resonate with practitioner concerns.

Chapter 7 Conclusion

This study set out to achieve a number of objectives as explained in Chapter 1, the contribution which has been made is the progress which has been made towards each of them, and is set out below.

The first objective was to develop a grounded theory of change processes relating to innovation in management accounting practice. This has been done and is described in Chapter 5, in which the findings from the study have been expressed as a model presenting the ABT implementation process as a related set of context, action and structure constructs. The model contains novel (in this context) salient concepts and offers insights into problems and issues at a detailed practical level incorporating iterative links between context and action. It seems to be, at least in part, explanatory in relation to the continuing problematic nature of implementation (Innes 2000).

The comparison with the prior literature (Chapters 2 and 3) which is presented in Chapter 6 found a broad consonance between the findings of this study and that literature. Practitioners seem to be aware of the normative advice available to them, but this advice is simplified and does not address important areas of practitioner implementation activity. The empirical studies of ABM implementation are relatively undeveloped with regard to the nature of practice and its relationship to outcomes.

The conceptual change models derived from sociology and from the diffusion literature are expressed at a high level of abstraction in language which is not everyday usage. In these respects they are inaccessible to practitioners. However, this study has related them to empirical findings, making them more accessible, and indicating how they “fit” those findings.

This study extends and elaborates the conceptual change process models examined and indicates areas where the normative and empirical ABM studies do not engage

with practitioner concerns. These process models and studies in turn contain elements which have not emerged in this study, indicating possible areas for further development.

The second objective was to increase knowledge and understanding of processes occurring during the implementation of Activity Based Management, of value to practitioners engaged in these processes as change managers. The value of the findings to practitioners needs to be tested in the field, however some initial statements can be made in relation to practical usefulness. The model is grounded in the first hand experiences of actors engaged in the process, which is the sort of knowledge sought by practitioners at the outset of this study. It identifies activities and choices to be made within the implementation process and suggests relationships between these and offers insights into potential sources of difficulty which may arise from a number of contributory factors. For example external and organisational change was found to be salient in that the creation of a static model in a dynamic context was connected to modelling difficulties and potential loss of credibility. Objective setting was found to be an important action element of the process, well developed in terms of properties and dimensions which represent usable practical knowledge. Communication and modelling activities were identified, along with their nature and likely sources of difficulty in this context

The third objective was to identify knowledge gaps relating to implementation practice, and research programmes to address these. Grounded theory based in practitioner accounts of experience seems to have been a fruitful avenue of investigation, which with the experience gained during this study would be designed to avoid as far as possible the limitations highlighted in section 6.6. Such studies would be useful in addressing some of the gaps which have been identified in this

study. The features and limitations of the model outlined in Chapter 6 include its partiality in relation to earlier and later activities in the implementation process. These could be examined by talking to practitioners at different stages of implementation.

Two elements of the model developed in this study are not yet addressed in the accounting literature, though the wider literature offers a range of studies in these areas. Since they have emerged as salient in this study, it seems appropriate that they should be studied in the accounting research community. These are communication and team operation. In the broad organisational literature, aspects of team operation have been examined and discussed (Eppler and Sukowski 2000, Landrum et al 2000, Van der Smagt, 2000), however the accounting literature is silent on this subject.

Team operation and team relationships with organisation members outside the team are issues around which theories are being developed.

An extension of the normative ABM literature into an explicit engagement with action structure relationships, and the activities which are currently missing (for example objective setting) seems likely to be useful. Further empirical studies of ABM implementation should be undertaken to test and develop this model, making it more context specific by using field and case studies.

Further work is also needed in relation to other kinds of change process in general, ABM is one of a number of new management accounting technologies, and exploration of practitioner experiences in relation to others (Balanced Scorecard for example) would also be valuable.

These areas for further study are by no means exhaustive, but sufficient to keep this researcher interested and occupied for some time to come!

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Appendix 1 Axial Coding Sample

Identify relevant categories/ concepts, their properties and dimensional ranges, from discussions amongst practitioners from a range of backgrounds, likely to produce comprehensive set of concepts from which to analyse individual cases....

Paradigm element	category	concept	Memo ref	property	Dimension from	Dimension to
	External conditions	Burning platform	E3			
	Agenda setting and matching Objectives Change drivers	Change driver (condition)	E5	Degree of reactivity Intentionality Controllability	Macro "change in market place" Reactive	Micro "financial crisis" Proactive
		Change	E5	Constant? External/ internal "fluid requirements"		
		Change management skills	E5			
	Problems					
	Conditions	Industry sector	E2	Level of cost tradition	Finance – "costing hasn't been very important"	
		User attitude	E2	Satisfaction with current system (influencing choice of pilot)	"they themselves felt frustrated by the way they worked"	

Appendix 2 Open Coding Sample

Open coding E1 Facilitation Notes - Outcomes

category	concept	Memo ref	property	Dimension from	Dimension to
Outcome (Consequence)			Number Familiarity/novelty Observability Measurability Articulation Shared Ambiguity Time distance Organisational space distance. Controllability Intentionality. Anticipation.		
	Technical output - Information gaps - "Information gaps filled"				
	Sub organisational effect "Accounting Profile"		Perceived value to organisation		
	Behavioural effect "Information not used"				

Memo 1 outcomes 28/3 – the properties/ dimensions can be developed similarly to those derived for objectives. Adding intentionality, and also anticipation.

Memo 2 – outcomes 28/3 – can group outcomes/ objectives on continuum from “soft” to “hard” and “close” to distant”.

Memo 3 outcomes 28/3 - “Information gaps filled” – example of relatively “hard”, “close”

Memo 4 – outcomes 28/3 – “Manager’ cost awareness” “thought processes” – “soft”, further away, attitude/ perception of managers. “Information not used” – user action – hard but far away.

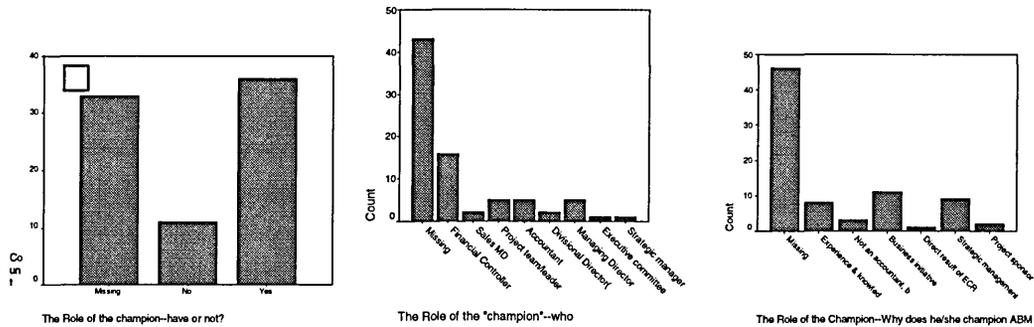
Memo 5 — outcomes 28/3 **information gaps** – problem in existing system which is improved by new system may link to acceptability of system

Mini framework idea – **problems in existing system** – crosscut with ?.. soft/ hard/ v close/far and ?

Appendix 3 – Champions Data

Information about the identity and role of the project champion was provided by participants at E2 – 4 in the orienting questionnaire.

The brief graphs below show that of the respondents who answered, the majority had a champion, and these were most often from a financial background. Their motivation for championing ABM was varied. More detailed qualitative responses are given below.



Facilitator's notes from E3 record points arising with regard to champions

Where is champ from?
 Finance? Problem "flexible accountant" but necessary for trust in data
 Ops – good
 Champions at start but not later
 Sporadic champion a problem
 Problem when no champion at start

Appendix 3 Champion – Orienting Questionnaires at E2,3 and 4

Who is the Champion	Why was s/he chosen?	What is the role?	Examples of champion's activities?
Financial Controller/Director	Experience & knowledge	Project manage at board level; ensure commitment throughout organisation	Provide framework of approach; decide strategy for change; workshop present progress against objectives; sell benefits
Financial Controller/Director	Business initiative	Review project rather than sponsor and salesman to the business; endorse the way forward	Roll out a successful pilot; support presentations
Project team/leader	Experience & knowledge	To generate/build a sound basis for future strategic business, implications and provide an understanding of costs incurred within the organization.	To formulate models(s), collection of data, development of drivers, analysis of BUs and support services, etc.
Sales MD	Not an accountant, believe the process and needs the information	To give profile, open doors, obtain resource	Sign equipment requests; Get presentation to Exec. Board; Drive project; Identify clearly critical info. Needs; Promote ABM actively; Pursue the culture change.
Financial Controller/Director	Experience & knowledge	Create awareness, demonstrate need for change, drive project on, political awareness, etc.	Educate, demonstrate key information gaps to be filled by ABM, & arrange training/workshops
Divisional Director (logistics)	Direct result of ECR (efficient consumer response) initiative	Link to Board, counsellor, resource provider, maintain momentum	Recruitment of project team
Managing Director	Business initiative	To give priority to the project; stress the importance to future organisation	Setting & agreeing objectives
Financial Controller/Director	Strategic management role	To influence, promote and instil ABM; mentality into "Waking Up" to customer profitability	Presentations to board; introduction of benefits at every meetings
Divisional Director (logistics)	Business initiative	Client	To initiate as his own objectives, promote ABM in business through high profile, encourages his managers to use the technique
.	.	Provide direction, solve problem and front projects	.
Accountant	Experience & knowledge	To understand costs of the organisation and report on profitability by product/channel	Branch/Agent profitability; ABC/ABM; Functional plannin & budgeting
Financial Controller/Director	Business initiative	Sponsorship; Guidance; Control	Member of project board; Key player in decision making; Sponsor for funding
Project team/leader	.	Be clear about objectives; sell project to other exec's; mobilise resources; support project team; ensure ongoing life of project is useful	.
Financial Controller/Director	Business initiative	To introduce central software & support users; resolve conflicts between multi-disciplinary teams & core businesses; monitor and deliver result.	Roll out of DCS software; changes to OPS software; advice on using new codes; monitor problems in usage & results; matching budgetting system to activity reports monitor cost centre, appropriateness
Financial Controller/Director	Project sponsor	To lead project board, report to the RM executive committee	Chain's project board: provide instruction on what each stage will achieve, project control.
Financial Controller/Director	Not an accountant, believe the process and needs the information	To sell to the executive committee to ensure ongoing support.	Presentation & secure buy in of MD & Executive
Accountant	.	Publicise project	Lobby senior directors & for resources, and provide presentations
Financial Controller/Director	Strategic management role	To drive and control the project with the support from Project Manager; report to FD the result of project	Represent on steering group, budget approval from board
Accountant	Experience & knowledge	To clear road blocks, review project timescales & milestones.	Encouraging operational managers to provide

			information; ensuring representations are mad to ensure the project is adequately resourced.
Managing Director	Business initiative	To co-ordinate, set standard, raise awareness of benefits	Run ABC user forums; set costing principles