

**Tracing the adoption of a
management innovation labelled
'knowledge working'
in a public sector agency in Scotland**

by

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ABSTRACT

This thesis investigates the process of *adoption* of management innovation in an organisational setting. It is based on primary research that explores and discusses in depth the introduction of a Knowledge Management programme (labelled 'Knowledge Working') within a distributed public sector agency in Scotland. The author was an employee of the organisation for a period of six years between the period 1999 and 2008. She latterly held the role of Knowledge Analyst and was a member of a task force recruited to implement Knowledge Working within the organisation.

The primary research that this work addresses is: *What is the process of adoption of a management innovation in an organisational setting?* A qualitative case study strategy generates an account of the process of adoption through three phases (initiation; implementation; and outcomes), the episodes within each phase, and decision-making across all phases. Qualitative material covering a longitudinal timeframe (1995-2008) were collected for data analysis. These derived from electronic sources and participant observations assigned to an adoption timeline. The coding of the data facilitated the identification of phases and episodes of the management innovation under scrutiny. These were then analysed with reference to the extant literature.

The study makes four contributions to knowledge. Three interrelated models (a model of decision-making; a combined adoption-decision-model; and a task force adoption-decision model) are theoretically significant because, to date, no attempt has been made: (1) to model decision-making for the process of *adoption* of management innovation (in general), or Knowledge Management; (2) to combine two of Rogers' (2003) separate models (an innovation-adoption model and an innovation-decision model); and (3) to model decisions to consider when adopting task forces (in general), and those for implementing Knowledge Management.

PUBLICATIONS ASSOCIATED WITH THIS RESEARCH

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1 CHAPTER 1: INTRODUCTION

1.1 Introduction

This chapter introduces the research in this thesis. It comprises five sections, the first of which provides a brief overview of the research. The next section states the research questions. Thereafter follow the research approach, the study's contribution to knowledge, and a summary of the thesis chapters.

1.2 An overview of the research

This research discussed in this thesis investigates the process of *adoption* of a management innovation in an organisational setting. The term 'management innovation' can refer to either the generation (or creation), *and/or* the adoption (or introduction), of 'a new management practice, process, structure or technique' that is perceived as being 'new' by organisations (Birkinshaw, Hamel & Mol, 2008 p. 825). Previous research into management innovation has focused on the process of *generation* (for example, Birkinshaw & Mol, 2006 and Birkinshaw, Hamel & Mol, 2008). However, there still remains a lack of knowledge on the process of *adoption* (Damanpour & Aravind, 2012 p. 447). It is this gap that the empirical research presented here addresses.

The study presented in this thesis describes and explores the process of adoption of a management innovation programme labelled 'Knowledge Working' (which, in practice, would be recognised elsewhere as 'Knowledge Management') within a public sector agency (PuSA). The author was an employee of PuSA for a period of six years. She latterly held the role of Knowledge Analyst and was a member of a task force recruited to implement Knowledge Working. A longitudinal case study approach traces the process of adoption within PuSA through three distinct phases: (1) initiation (Chapter 4); (2) implementation (Chapter 5); and (3) outcomes (Chapter 6).

1.3 The research questions

The primary research question that this work sought to address is: *What is the process of adoption of a management innovation in an organisational setting?* To answer this question it was necessary to consider two further sets of questions. The first set relates to the *attributes* of a management innovation. The second set relates to *phases and episodes* across the whole process of adoption of the management innovation. An additional third, and final, set of questions gave the opportunity to explore the *practical value* of the research output. The research questions are summarised in Table 1–1 below.

Table 1–1: The research questions

Research questions	
Main research question: What is the process of adoption of management innovation in an organisational setting?	Questions related to the attributes of management innovation:
	RQ 1: What characterises management innovation?
	RQ 2: What is the influence of internal factors on the process of adoption of management innovation?
	RQ 3: What is the influence of external factors on the process of adoption of management innovation?
	Questions related to phases and episodes in the process of adoption:
	RQ 4: What are the phases and episodes in the process of adoption of management innovation?
	RQ 5: What are the key decision-points and options within each phase of the process of adoption of management innovation?
	RQ 6: To what extent are the sequence of phases and episodes in the process of adoption of a management innovation linear or non-linear?
	RQ 7: How is the process of adoption similar and/or different from the process of generation of management innovation?
	Questions related to practical value of the research outputs:
	RQ 8: To what extent can the process of adoption of a management innovation be modelled for practical use?
	RQ 9: What lessons can be learned from this particular study?

1.4 The research approach

A case study protocol sets out the stages in the research process. A visual representation of this case study protocol can be seen in Figure 1–1.

In the first stage of the research process entitled *Research Design*, a single pan-organisational case study and two subsidiary embedded units were chosen as the site for data collection. This choice reflected the researcher's membership of a task force recruited to implement Knowledge Working, and her role of Knowledge Analyst, in two subsidiaries of PuSA. This stage also included a review of the extant literature on the broad themes of relevance to the study: notably management innovation and evidence from the literature that Knowledge Management can be conceived as such.

In the second stage - *Data Management* - two types of documentary materials were gathered: (1) historical archive material generated within PuSA prior to the researcher's employment; and (2) situated material gathered in the period of the researcher's employment as a Knowledge Analyst. The documents, e-mails, web pages, and field notes selected for analysis were gathered together in a case study database. From here a chronological timeline was generated to display the data and prepare it for analysis.

The third stage, labelled in Figure 1–1 as *Analysis and Discussion*, was concerned with the analysis of the data collected and findings from the study. The literature review findings from stage 1 were also important to this activity. These generated structured questions within a framework for both interrogating the data and reflecting on the study's findings.

The fourth and final stage to conclude the study comprised a set of activities related to reflecting on the research undertaken, discussing implications for theory and practice, and suggesting areas for further research. This was achieved throughout the process of writing up the report of the study in the format of this thesis.

1.5 The contribution to knowledge and practice

The study makes four main contributions to knowledge. The first three contributions are theoretically significant, whilst the fourth is methodologically significant.

1. The first significant contribution is a model of decision-making relating to RQ 5. To date no attempt has been made to model decision-making for the process of *adoption* of management innovation (in general) or Knowledge Management;
2. The second contribution is a combined adoption-decision-model of management innovation. This relates to RQ 8. This combines two separate models: an innovation-adoption model and an innovation-decision model (see Rogers, 2003 pp 138 & 421);
3. A third contribution is the development of a model for the adoption of a task force that includes decision-making. This relates to RQ 9. At present, no model exists that includes decisions to consider when adopting task forces in general, and those for implementing Knowledge Management;
4. The fourth, and final, contribution is of methodological significance relating to RQ 2. Discourses can be used to analyse the compatibility between: management innovation; organisational structures (both informal and formal); and the ambition for organisational change. It can also highlight problems associated with decision-making and the consequences of these decisions.

These contributions will be discussed in more detail in the conclusion Chapter 8. It should be noted however, that the role of theory is to be 'practically useful' (Corley & Goia, 2009 p. 16) to practitioners, in this case managing the process of adoption of management innovation in organisational settings. The three interrelated models (a model of decision-making; a combined adoption-decision-model; and a task force adoption-decision model) mentioned above can be used as tools for the project management of management innovations by identifying the questions to be addressed, and the decisions to be made at particular points of the process, taking into account local contexts. This research has also been conducted in the expectation that others may learn from

the findings reported in Chapters 4, 5 and 6. Practitioners can draw conclusions from a summary of case study findings and apply lessons learned (see Table 6–2 on page 249 in Chapter 6). The hope is that future management innovation journeys are less likely to become, in the words of the KW Community of Practice sponsor in the case study organisation discussed in this thesis, a tale of ‘the tail wanting to wag the dog, but the dog doesn’t want to be wagged’ (2005).

1.6 A summary of the chapters

This thesis contains eight chapters in total. Figure 1–1 shows how the case study protocol relates to the structure of this thesis.

Chapter 1 (this first chapter) introduces the thesis by providing: a brief overview of the research; the research questions; the research approach; the study’s contribution to knowledge, and a summary of the thesis chapters.

Chapter 2 presents an evaluation of innovation, management innovation, knowledge management and business literatures that are of direct relevance to the research presented in this thesis. A key contribution of this chapter is a framework for the discussion and exploration of the process of adoption of management innovation in an organisational setting (see Figure 3–7 on page 133 in Chapter 3). This framework comprises three phases (initiation; implementation; and outcomes), with each phase made up of episodes. Decision-making takes place at various points across the whole process. The evaluation of literature also highlights contextual factors (for example, the organisational setting for innovation; networks involved in the innovation process; power and conflict in the innovation process; and the ambition for organisational change) influencing the process of adoption of management innovation. Consideration is also given to the introduction of a task force (a practitioner network) to adopt Knowledge Management in public sector organisations. This reflects the choice of PuSA, the public sector agency in which the research in this thesis was conducted, to adopt a task force to

implement Knowledge Working (a programme of Knowledge Management) in the organisation.

Chapter 3 explains how the research was conceived, designed and conducted. This chapter presents the research design choices for this study: an inductive research approach; a case study strategy; qualitative multi-methods and a longitudinal timeframe to gather material and analyse data. This chapter also describes the organisational background of the public sector agency in which this research was conducted. This provides necessary background information for a full understanding of analysis presented in Chapters 4, 5 and 6. The fieldwork is discussed against four research stages that appear in a case study protocol (see section 1.4 above for an overview of the research approach). In addition, eight 'big tent' criteria for qualitative research (Tracy, 2010 p. 16) is presented as a suitable framework to assess the research presented in this thesis.

Chapters 4, 5 and 6 analyse the three phases (initiation, implementation and outcomes) of the adoption of Knowledge Working as a management innovation within PuSA. Each chapter considers whether anticipated episodes of the process of adoption of management innovation are evident in practice. The analysis also investigates decision-making, as this is a key feature of the process of adoption of management innovation. Various contextual factors (for example, organisational setting; networks involved; power and conflict) influencing the adoption of management innovation are key considerations too. The findings of each chapter contributes evidence that is relevant to addressing all the study's research questions (RQs 1-9) as noted in Table 1-1.

- *Chapter 4* focuses on the initiation phase 'consisting of all the [activities] leading up to the decision to adopt' (Rogers, 2003 p. 128). This chapter discusses and explores four episodes in this initiation phase observed in PuSA: agenda-setting; knowledge/research; matching and persuasion. In this chapter the ambition for organisational change in PuSA between 1999 and 2004 has been expressed as discourses. Four discourses (a 'fiefdom' and 'one network' discourse at pan-organisational level and a corresponding

'local delivery' and 'network delivery' at subsidiary level) are drawn on in the analysis to explore whether Knowledge Working matched (was compatible with) the overall agenda for 'one network' change in PuSA. These discourses are also used to explore problems in the implementation phase of Knowledge Working in Chapter 5.

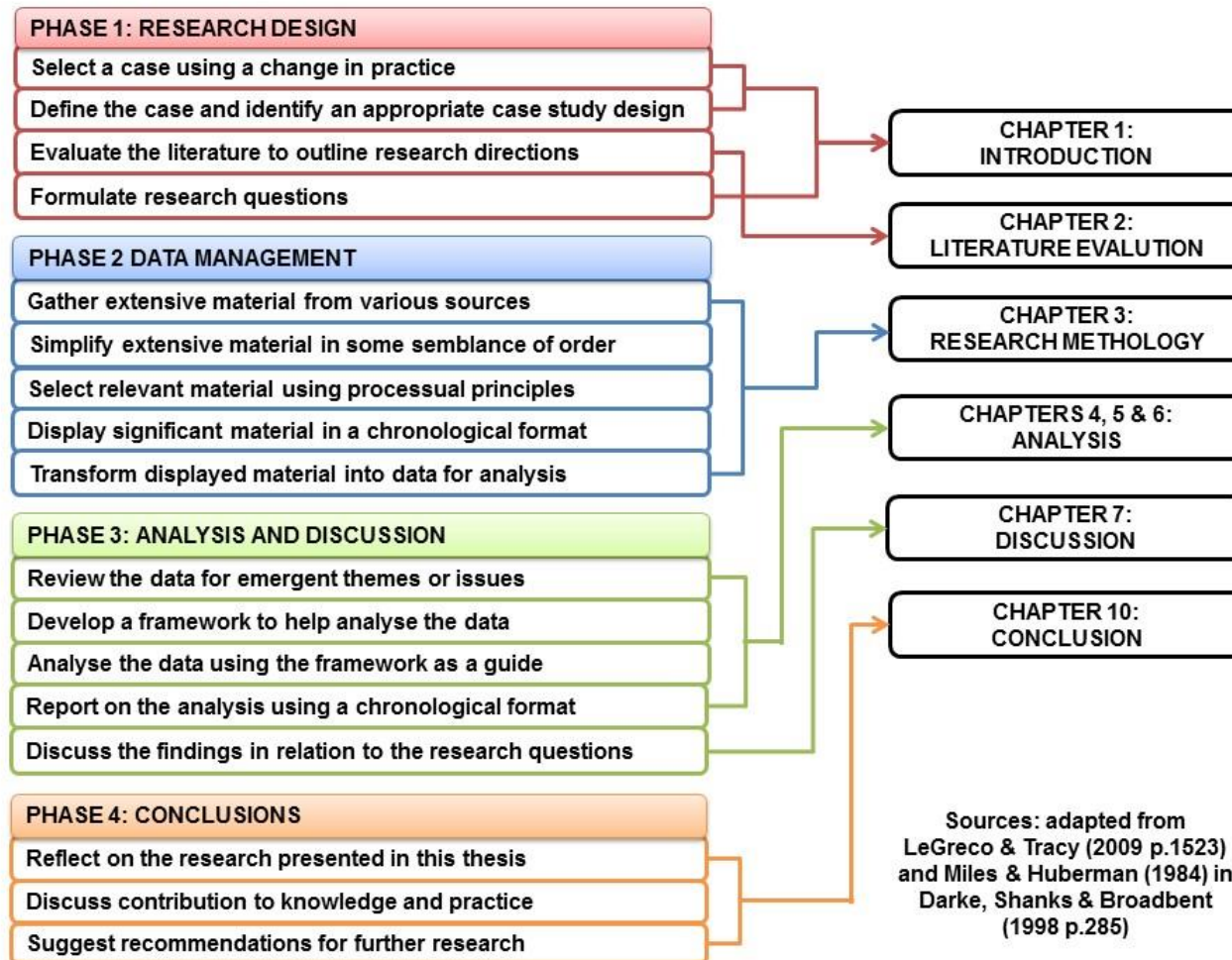
- *Chapter 5* considers the implementation phase 'consisting of all the [activities and decisions] involved in putting the innovation into use' (Rogers, 2003 p. 128). This chapter discusses and explores three episodes in this implementation phase observed in PuSA: modification; operationalisation; and clarification/confirmation. The modification episode includes coverage of: (1) the modifications that occurred when the management innovation was put into practice; and (2) the influence of these modifications on its implementation in the operationalisation and clarification/ confirmation episodes.
- *Chapter 6* focuses on the outcomes phase of management innovation in PuSA. This chapter discusses and explores all activities leading up to: (1) 'routinising' or 'incorporating the innovation into existing organisational [routines]' (Rogers, 2003 p. 138); (2) discontinuing adoption due to 'disenchantment' (or 'dissatisfaction with performance') or 'replacement' of the innovation with something better (Rogers, 2003 p. 190). Additionally, this chapter presents a summary of case study findings from Chapters 4, 5 and 6. This includes: key decisions in each episode; contextual/facilitating factors influencing decision-making; and the consequences of decisions made over the period of adoption (2000-2008) of Knowledge Working in PuSA (see Table 6–2 on page 249 in Chapter 6). Practitioners can draw conclusions from this study and apply lessons learned to current or future adoptions of management innovation.

Chapter 7 discusses the research findings with direct reference to the research questions (RQs 1-9) as articulated in Figure 1–1. The theoretical insight about the process of adoption of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature review Chapter 2 relates to: (1) *attributes* of management innovation (RQs 1-3); (2) *phases and episodes* in the process

of *adoption* of management innovation (RQs 4-7); and (3) the *practical value* of the research outputs (RQs 8-9). Thirteen findings generate new theoretical insight on the process of adoption of management innovation in an organisational setting. Four, however, have been chosen to demonstrate a significant contribution to knowledge (see section 1.5 above). Three interrelated models (a model of decision-making; a combined adoption-decision-model; and a task force adoption-decision model) are theoretically significant and have practical utility. The fourth, a discourse framework, is methodologically significant.

Chapter 8 concludes the work by reflecting on the research presented in this thesis using Tracy's (2010) 'big tent' criteria for qualitative research. This chapter concludes the thesis by: reviewing the research questions; stating the contribution to knowledge and practice; assessing the suitability of research design; and providing recommendations for further research.

Figure 1–1: The case study protocol and thesis chapters



2 CHAPTER 2: LITERATURE EVALUATION

2.1 Introduction

The purpose of this literature evaluation is to analyse literature to form a framework for the discussion and exploration of the process of adoption of management innovation in an organisational setting. The literature selected for evaluation relates to the attributes of innovation, the scope of which is discussed below.

Innovation is 'a complex construct studied from multiple perspectives' (Damanpour & Schneider, 2008 p. 496). This complexity is evident in the struggles to find 'a multidisciplinary definition of innovation' (Baregheh, Rowley & Sambrook, 2009 p. 1323). A definition can be worked out by considering attributes of innovation as discussed by Baregheh et al (2009) and Rogers (2003). Innovation can be defined as a process, which: (1) consists of various phases and/or episodes; (2) differs in aim, nature, rate and type of outcome; and is (3) influenced by context (for example, organisational setting; networks involved; power relations; and ambition for innovation), and means (or resources) of innovation.

These attributes of innovation will be discussed in more detail in the main body of this chapter in five main sections:

- The first section identifies different types (or forms) of innovation, including management innovation. This is followed by a discussion of management innovation as a domain of research, and the evidence that Knowledge Management can be considered a management innovation;
- The literature evaluation then turns to the general innovation literature, offering a comparison of five different innovation models. Following a comparison of these five models, episodes that may be seen when studying

the process of *adoption* of management innovation in three phases (initiation; implementation, and outcomes) are then explored¹;

- Decision-making that takes place in the process of adoption of management innovation is then discussed;
- Thereafter, the chapter evaluates contextual factors that influence the process of adoption of innovation in general. It turns to the management and organisational change literature to discuss: the organisation setting of innovation; networks, power and conflict; and the ambition of innovation. These aspects help explore the influence of contextual factors on the adoption of management innovation;
- Finally, the study of Knowledge Management as a management innovation is explored. This looks at the study of Knowledge Management in the public sector. It also considers the introduction of a task force to adopt Knowledge Management in public sector organisations.

2.2 Different types of innovation

Research into innovation has focused on various aspects (for example, typologies, antecedents, processes, attributes and consequences) at different levels of analysis (for example, individual, community, organisation, industry, and economy) (Damanpour & Aravind, 2012 p. 424). Research into innovation at an organisational level covers new developments in terms of: (1) product and service features or intended uses; (2) processes of production or delivery of products and services; (3) methods of marketing products or services; or (4) organisational practices (for example, new methods to reduce administrative costs); workplace organisation (for example, new organisational structures) or external relations (for example, new principles guiding stakeholder, partner, and customer relations) (OECD and Eurostat, 2005 pp 16-17).

¹ In this thesis innovation is a process comprising three main phases: initiation; implementation; and outcomes. The phases are made up of two or more episodes.

In recent years Birkinshaw, Mol and Hamel's research has drawn attention to a type of innovation that can provide organisations with a competitive advantage. This is labelled 'management innovation', a subfield of organisational innovation (for example, Birkinshaw, Hamel & Mol, 2005, 2008; Birkinshaw & Mol, 2006; Mol & Birkinshaw, 2009a, 2009b). Management innovation is defined as 'the generation [or adoption] of new management processes, practices, structures and techniques' in organisational settings (Birkinshaw, Hamel & Mol, 2008 p. 825).

In their book *Giant steps in management*, Birkinshaw and Mol (2008) highlight numerous management innovations that have been introduced since the 1950s. Their examples include: managing business processes (for example, business process re-engineering); reporting on operations (for example, balanced scorecard); managing human resources (for example, 360-degree feedback); structuring organisations (for example, matrix organisation); managing customer and partner relations (for example, customer relationship management); and determining strategic direction (for example, scenario planning) (p.vi-vii). They agree that these management innovations share some common characteristics.

2.2.1 Characteristics of management innovation

There are four main characteristics of management innovation. It: (1) exhibits novelty; (2) shows evidence of implementation; (3) intends to further organisational goals or enhances performance; and (4) alters the way managerial work is performed (Birkinshaw, Hamel & Mol, 2005; Mol & Birkinshaw, 2008). These characteristics merit further discussion to make clear why Knowledge Management can be considered a management innovation.

2.2.1.1 Characteristic 1: A management innovation has a degree of novelty

Management innovation, like other forms of innovation, must be perceived as new by innovators and potential adopters (Mol & Birkinshaw, 2008; Rogers, 2003 p. 12). Management innovation can be new to the state of the art (Birkinshaw, Hamel & Mol, 2008 p. 825) in that it has no known precedent (Mol & Birkinshaw, 2009 p. 1269). In other words, the management innovation does not currently exist elsewhere and has to be created (Birkinshaw, Hamel & Mol, 2008 p. 825; Mol & Birkinshaw, 2009 p. 2). Equally, a management innovation may exist elsewhere but be new to the organisation (Mol & Birkinshaw, 2009). It therefore represents 'a significant and novel departure from generally accepted or standard management practices' in organisations (Mol & Birkinshaw, 2009 p. 2). Management innovations can therefore be perceived as entirely unique or significantly novel (Birkinshaw et al. 2008 p. 828).

2.2.1.2 Characteristic 2: A management innovation shows evidence of implementation

Management innovation, like other types of innovation, involves implementation (Birkinshaw et al, 2005 p. 3; Birkinshaw & Mol, 2006 p. 2012; Birkinshaw et al, 2008 p. 825; Mol & Birkinshaw, 2008b p. 4; Mol & Birkinshaw, 2009 p. 2). In the context of management innovation, the term 'implementation' refers to either commercialising and introducing new management innovation products or services to market, or putting new management innovations into use in organisational settings for the first time (for example, Damanpour & Wischnevsky, 2006 p. 273; OECD & Eurostat, 2005).

2.2.1.3 Characteristic 3: A management innovation intends to further organisational goals or enhance performance

The aim of innovation (in general) is to maintain, or advance, a competitive advantage (OECD & Eurostat, 2005). Management innovation furthers organisational goals (Birkinshaw et al, 2005 p. 3) or enhances firm performance (Mol & Birkinshaw, 2009 p. 3). Success is not a criterion for management innovation (Mol & Birkinshaw, 2008 B p. 5) as the outcomes of the process of innovation (in general) cannot be predicted (Rogers, 2003). Nevertheless, it is recognised that management innovations may (either directly or indirectly) contribute to organisational success (Mol & Birkinshaw, 2008b p. 5).

2.2.1.4 Characteristic 4: A management innovation alters the way managerial work is performed

Management innovation, like other types of innovation, makes significant improvements to an organisation (OECD & Eurostat, 2005 p. 52). In particular, management innovation significantly alters how managerial work is performed (Birkinshaw et al, 2005 p. 3). In the management innovation literature managerial work is reported to include: 'setting goals and laying out plans; motivating and aligning effort; coordinating and controlling activities; accumulating and allocating resources; acquiring and applying knowledge; building and nurturing relationships; identifying and developing talent; and understanding and balancing the demands of outside constituencies' (Hamel, 2006 p. 3). Hamel (2006 p. 3) suggests that Knowledge Management is a process that has the potential to significantly alter how managerial work is performed.

2.2.2 Knowledge Management as a type of management innovation

Knowledge Management has long been recognised as a *facilitator* of innovation (OECD & Eurostat, 2005; Darroch, 2005; Du Plessis, 2007; Newell, Robertson, Swan & Scarbrough, 2009). Grant (2011 p. 117) also argues that ‘not only is the effective management of knowledge a critical element of the [innovation process], Knowledge Management is, of itself, a major innovation’. Whether Knowledge Management can be conceived as a management innovation can be determined by considering it against the criteria for management innovation above.

2.2.2.1 Characteristic 1: Knowledge Management has a degree of novelty

There is no universal definition of Knowledge Management (Dalkir, 2011; Jashapara, 2011). Here it is defined as a systematic approach (Dalkir, 2011 p. 3) to managing processes of knowledge: capture; creation; acquisition; storage; sharing; dissemination; utilisation; evaluation etc. in organisational settings (Dalkir, 2011 p. 53; Heisig, 2009 p. 10). It is the perception that various structures, systems and techniques introduced to manage these knowledge processes are ‘new’ (Rogers, 2003), and not already in use in organisations (OECD & Eurostat, 2005 pp 52-55), that distinguishes Knowledge Management as a management innovation.

Knowledge Management, as a concept, is nothing new (Hanssen, Nohria & Teirney, 1999; Kababadse, Kakabase & Kumin, 2003; Jashapara, 2011; Mårtensson, 2000). Nevertheless, it was perceived as new by academics in the 1960s who started using the label ‘Knowledge Management’ in the management literature (Lambe, 2011), and by practitioners in the 1970s who started introducing Knowledge Management in organisations (Wiig, 1999).

Reference is frequently made to two novel Knowledge Management strategies:

- A codification (or technology-led) strategy is typically used to capture, store, retrieve and transfer explicit knowledge using information technology systems (Hansen et al, 1999; Newell et al, 2009; Jashapara, 2012). Knowledge Management systems (or tools) that are frequently introduced include: intranets; extranets; and wiki's (Jashapara, 2011). Examples of other novel Knowledge Management systems that have been adopted include: document management; decision support; group support; executive information; workflow management; and customer relationship management (Jashapara, 2011 p. 255);
- A personalisation (or people-led) strategy is where tacit knowledge is created and shared amongst people through direct social interaction (Hansen et al, 1999; Newell et al, 2009; Jashapara, 2011). Two personalisation strategies have been identified: process and practice (Newell et al, 2009). A process strategy builds social networks and trust among people whereas a practice strategy develops communities of practice (CoPs) (Newell et al, 2009). CoPs are defined as 'groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Wenger, McDermott & Snyder, 2002 p. 11). CoPs have been described as a 'killer application for Knowledge Management' (Clemmons Rumizen, 2002 p. 85) and are formally recognised as a management innovation (Mol & Birkinshaw, 2008).

2.2.2.2 Characteristic 2: Knowledge Management shows evidence of implementation

Knowledge Management shows evidence of implementation across a range of organisational settings. For example, Wiig (1997 p. 10) reports that Chaparral Steel was one of the first companies to implement Knowledge Management in 1975. Since then, other companies have been successful in implementing Knowledge Management. Lam & Chua (2005 p. 424) mention the successful implementation of Knowledge Management initiatives in various companies (for example, knowledge network in Buckman Laboratories; Eureka database in Xerox; Tech clubs in DaimlerChrysler; and CoPs in Eli Lilly). A commonly cited Knowledge Management technique is After Action Reviews implemented by the US Military in the mid-1970s (Garvin, 2000).

Knowledge Management has also been implemented by management consultants and academic institutions. It is reported that in 1989 consulting firms started their own Knowledge Management projects, and by the mid-1990s were offering Knowledge Management consulting services (Dalkir, 2011 p. 19). Wiig (1999) states that by 1997 numerous Knowledge Management conferences had been held, a number of Knowledge Management journals were established, and many Knowledge Management books had been published. Dalkir (2011 p. 19) affirms that, by 2003, many universities and other professional institutions (for example, Knowledge Management Consortium International) offered degrees in Knowledge Management.

The generation and adoption of different: strategies; perspectives; frameworks; models; systems, tools and techniques; structures and roles accounted for in books written by Dalkir (2011) and Jashapara (2011) are also evidence of Knowledge Management implementation.

2.2.2.3 Characteristic 3: Knowledge Management intends to further organisational goals or enhance performance

Knowledge Management is intuitively important from an economic perspective (Despres & Chavaul, 1999 p.110). Since the 1990s much has been written about the rise of service or knowledge industries; the globalisation of business environment; more sophisticated and discerning customers; and the introduction of new information communication technologies (for example, Ives, Torrey & Gordon, 1999). These changes in the economic environment (as portrayed in knowledge economy and electronic business discourses) have been cited as antecedents for Knowledge Management (for example, Chase, 1997; Despres & Chavaul, 1999; Wiig, 1999; Prusak; 2001). This economic perspective places an emphasis on knowledge, information and technology as key drivers of economic growth (OECD, 1999 p. 3) and fundamental to the operations of organisations (OECD & Eurostat, 2005 p. 88).

The strategic drivers for Knowledge Management (in general) are to enhance organisational competitiveness and innovativeness (OECD & Eurostat, 2005 p. 88; Dalkir, 2011 p. 12). It is widely reported that, at an operational level, the drivers for Knowledge Management are to improve operational effectiveness and efficiency (for example, Jashapara, 2011; Schultze & Leidner, 2002). In public sector organisations, in particular, the drivers for Knowledge Management are: (1) internal to 'support and facilitate organisational change' and (2) external 'to improve policy implementation and outcomes' (BSI, 2005 p. 2). Although a successful outcome is not a criterion for management innovation, it has been suggested that there are two levels of success in public sector organisations: (1) 'establishing Knowledge Management as a permanent or at least stable competence and/or function within an organisation' and (2) 'improving knowledge behaviours and knowledge practices, resulting in more effective knowledge sharing and organisational learning' (BSI, 2005 p. 2).

2.2.2.4 Characteristic 4: Knowledge Management alters the way managerial work is performed

Knowledge Management focuses managers' attention on one particular aspect of managerial work: leveraging the knowledge of human resources (both external and internal) to achieve a competitive advantage (Jashapara, 2001; Dalkir, 2011). This knowledge perspective has altered the way managerial work is performed. There is less emphasis on coordinating and controlling activities typically associated with managerial work. Rather, there has been an increased focus on: developing an organisational and technological infrastructure (Newell et al, 2009; Conley, 2009; Baskerville & Dulipovici, 1996 p. 92); cultivating a nurturing environment (Nonaka, Toyama, & Konno, 2000); and developing staff competencies (Conley, 2009; Reige, 2005) to support knowledge processes of creation, acquisition, sharing, storage etc. (Heisig, 2009). Managerial attention has also turned to: developing knowledge strategies to support strategic and operational planning (Halawi, McArthy, & Aranson, 2006); fostering organisational learning (Jashapara, 2011 p. 165); supporting innovation processes (Newell et al, 2009); and monitoring intangible assets (Baskerville & Dulipovici, 2006 p. 86). Knowledge Management thus alters the way managerial work is performed.

The evaluation of literature above illustrates that Knowledge Management meets all the criteria for management innovation. Although Knowledge Management has not been explicitly treated as a management innovation in any earlier research, it can be conceived as such.

2.2.3 Management innovation as a domain of research

Having established that Knowledge Management may be conceived as a management innovation, it is worth considering the theme management innovation per se as a domain of research.

Birkinshaw, Hamel and Mol (2008 p. 827) classify prior management innovation research into four 'perspectives'. These perspectives differ in: research focus; research context; level of analysis; and resource outcomes (see Table 2–1). What is missing from such perspectives is a detailed understanding of the process through which management innovations are *generated* (Birkinshaw & Mol, 2006; Birkinshaw, Hamel & Mol, 2008) or *adopted* (Damanpour & Aravind, 2012) in organisational settings. Of the research that does exist in this domain most considers the process of *generation* of management innovation, employing a rational perspective of the different roles played by external and internal change agents (for example, Birkinshaw & Mol, 2006; Birkinshaw, Hamel & Mol, 2008). There is still a requirement to understand the process of *adoption* of management innovation in organisational settings (Damanpour & Aravind, 2012 p. 447).

Table 2–1: Four perspectives of management innovation research

	Institutional Perspective	Fashion Perspective	Cultural Perspective	Rational Perspective
Research Focus	An institutional perspective focus on the socioeconomic conditions in which new management ideas and practices take shape.	A fashion perspective focuses on the dynamic interplay between users and providers of management ideas.	A cultural perspective focuses on how an organisation reacts to the introduction of a new management practice.	A rational perspective focuses on how management innovations and the people who initiate them deliver improvements in organisational effectiveness.
Research Context	Research considers institutional conditions and attitudes of major groups of influencers.	Research considers suppliers of new ideas and the legitimacy of their proposals.	Research considers the culture of the organisation in which the innovation is introduced.	Research considers the actions of people initiating the process from inside or outside the organisation.
Level of Analysis	The level of analysis is the organisation and industry or country.	The level of analysis is the organisation and market for new ideas.	The level of analysis is the individual and the organisation.	The level of analysis is the individual and the organisation.

Research Outcomes	The outcomes are progressive changes in management ideology and/or practice and sometimes towards more effective ways of working.	The outcomes are a cyclical process of hype then disillusionment with no evidence that innovation leads to long term benefits.	The outcomes are a socially constructed change process with usually very little change in the way of working and perpetuation of existing power relations.	The outcomes are progressive changes in management practice toward more effective ways of working although success is not guaranteed.
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Source: Birkinshaw, Hamel and Mol (2008 pp 826-827)

2.3 Models for innovation

While there are numerous innovation models, there are only two that are labelled 'management innovation': Birkinshaw & Mol (2006); and Birkinshaw, Hamel and Mol (2008). Of the extensive number of general innovation models, three others (in addition to the work of Birkinshaw, Hamel & Mol) have been selected for analysis here for their significance and relevance to this study: (1) Rogers' (2003 p. 138) model of the innovation-development process is important because it relates to generation; (2) Rogers' (2003 p. 421) model of the ²innovation-adoption process is concerned with the adoption of innovations in organisational settings; and (3) Rogers' (2003 p. 170) model of the innovation-decision process is closely tied with the process of adoption of innovation in organisations. This model focuses on the process of individual or group decision-making in adopting innovations (Rogers, 2003). The work of Rogers (2003) is important because his work is highly cited in the innovation literature. Similarities and the differences in these models, and episodes that appear in them, are outlined below.

2.3.1 Similarities and differences in models of innovation

There are similarities and differences in the innovation models selected for analysis here. These models can be compared in terms of: (1) levels of focus of innovation research (individual/group; organisation; and industry/country); (2) type of innovation activities (generation; diffusion and adoption); and (3) nature of the innovation process (phases and episodes) as summarised in Table 2–2.

² Rogers (2003 p. 421) uses the label 'innovation process in organisations'

Table 2–2: Similarities and differences in five innovation models

Innovation processes		Birkinshaw & Mol (2006): Management innovation generation model	Birkinshaw, Hamel & Mol (2008): Management innovation generation model	Rogers (2003): Innovation-development model	Rogers (2003): Innovation-decision model	Rogers (2003): Innovation-adoption model
Level of focus of innovation research	Individual/Group			✓	✓	
	Organisation	✓	✓			✓
	Industry/Country			✓		
Type of innovation activities	Generation	✓		✓		
	Diffusion	✓		✓		
	Adoption			✓	✓	✓
Nature of the innovation process	Phases					✓
	Episodes	✓	✓	✓	✓	✓

Source: original

The characteristics of the models are rarely discussed in the management innovation literature. For this research it is necessary to turn to the broader innovation literature (in general) to discover how such characteristics are perceived.

Researchers who study innovation at an organisational level consider the generation, diffusion and adoption of innovation to be three distinct processes (Damanpour & Aravind, 2012). Here:

- The process of *generation* is a creative process that covers all episodes aimed at creating an innovation that is unknown or distinctive from pre-existing innovations (Damanpour & Wischnevsky, 2006). This uniqueness is not necessarily classed as an 'invention', since 'innovation is possible without anything we should identify as invention, and invention does not necessarily induce innovation' (Schumpeter, 1939 p. 80). The process of generation results in different types of outcomes. These can be labelled product, process, marketing or organisational innovation (OECD & Eurostat, 2005 p. 47). These innovations are 'a valued end in itself' (Damanpour & Wischnevsky, 2006 p. 275). They can be later adopted in the organisation in which it was generated, or diffused to other organisations for adoption (Birkinshaw & Mol, 2006; Damanpour & Wischnevsky, 2006);
- *The process of diffusion* is a communication process (Rogers, 2003 p. 6) that covers all episodes related to 'supplying [innovations] for transfer to, and use by, other organisations' (Damanpour & Wischnevsky, 2006 p. 275). Rogers (2003 p. 6) uses the term 'diffusion' to refer to the spread of new ideas, whether planned or spontaneous. The process of diffusion is considered supplementary to the process of generation and adoption. Innovations are first generated, then diffused for subsequent adoption in organisational settings (Damanpour & Aravind, 2012);
- *The process of adoption* is a problem-solving process that covers all episodes involved in 'how an organisation becomes aware of new [innovations], acquires, adapts and uses them' (Damanpour & Aravind, 2012 p. 426). This process assimilates 'new' (albeit pre-existing) innovations into an organisation for the first time to address particular

organisational issues (Damanpour & Wischnevsky, 2006; Rogers, 2003). This is also labelled innovation, for 'as long as an idea is perceived as new to the people involved it is an 'innovation' even though it may appear to others to be an 'imitation' of something that exists elsewhere' (Van de Ven, 1986 p. 592). The outcome of this process is some form of organisational change (Rogers, 2003). As such, innovation may 'contribute to organisational success but is not necessarily the primary success factor' in itself (Damanpour & Wischnevsky, 2006 p. 275).

General innovation research has focused on the difference between the generation and adoption processes (for example, Damanpour & Aravind, 2012; Damanpour & Wischnevsky, 2006; Gopalakrishnan, & Damanpour, 1994). As described above these processes differ in type of process, degree of novelty, and attributable success. There is, however, another distinguishing characteristic. In the process of adoption (but not the process of generation) episodes are grouped together into phases.

In the literature Rogers (2003) differentiates between an initiation and implementation phase in the process of *adoption* of innovation (in general). The initiation phase consists 'of all [activities] leading up to the decision to adopt' (Rogers, 2003 p. 170). The implementation phase consists 'of all the activities and decisions involved in putting the innovation into use' (Rogers, 2003 p. 170). Rogers (2003) includes a 'routinisation' episode in the implementation phase, and also mentions that routinisation can occur after this phase is complete. It can therefore be argued that routinisation can be viewed as an outcome of the process of adoption of management innovation. In the Knowledge Management literature routinisation (labelled 'institutionalisation') is presented as a distinct phase in the process of adoption (for example, Chua & Lam, 2005; Lin, 2014). This outcomes phase, using Rogers (2003 p. 157) description of the 'consequences' episode in the innovation-development model, refers to 'changes that occur to an individual or social system as a result of the adoption or rejection of an innovation'.

The 'transition' between episodes has also merited attention (Gopalakrishnan & Damanpour, 1994 p. 99). Gopalakrishnan & Damanpour (1994 p. 99) report that researchers who focus on the *generation* process have adopted either a departmental or activity approach to studying this transition. A departmental approach focuses on movement from one organisational department to another. In contrast, an activity approach focuses on the activities involved in producing an innovation (for example, moving from prototyping through testing to development). Researchers who study the *adoption* process have focused on decision-making to explain the transition between episodes (for example, Rogers, 2003). In his research, Rogers (2003 p. 170) differentiates between 'two broad activities' (labelled 'phases' in this thesis as noted in the footnote on page 12): initiation and implementation. An adoption decision-point marks the transition from episodes in the initiation phases to episodes in the implementation phase (Gopalakrishnan & Damanpour, 1994 p. 99).

Innovation research has also explored the sequencing of these episodes (Gopalakrishnan & Damanpour, 1994). It is generally accepted that the episodes in the innovation process do not occur in a set sequence (Van de Ven, 1986; Chen & Van de Ven, 1996; Birkinshaw, Hamel & Mol, 2008; Newell et al, 2009). This is because the innovation process is often 'punctuated by shocks, setbacks and surprises' (Greenhalgh, Robert, McFarlane & Kyriakidou, 2005 p. 601). Research suggests that the more complex the generation or adoption process, the more difficult it is to identify the sequence of episodes (Gopalakrishnan & Damanpour, 1994). There may be a number of random episodes that run concurrently and in parallel with each other. As a result, the outcome of the innovation process is uncertain and cannot be predetermined (Rogers, 2003; OECD & Eurostat, 2005; Cheng & Van de Ven, 1996; Swan et al, 2009).

2.3.2 Episodes in models of innovation

Having considered episodes in general, this analysis of the literature turns to specific episodes that form part of the innovation models summarised in Table 2–2 on page 25. Reference is made to five models (*with episodes shown in italics*).

- Birkinshaw & Mol's (2006 p. 82) model of the management innovation generation process includes: dissatisfaction with some aspect of the organisation [*dissatisfaction with the status quo episode*]; seeking inspiration from outside sources for new management ideas [*inspiration episode*]; inventing a contextual solution to the organisational problem [*invention episode*]; as well as seeking validation to justify its introduction pre-and post-implementation [*external and internal validation episode*];
- Birkinshaw, Hamel & Mol's (2008 p. 831) model of the management innovation generation process describes how 'changes perceived in the environment [*motivation episode*] lead to variations in management practices [*invention episode*], some of which are then subject to internal selection [*implementation episode*] and retention [*theorisation and labelling episode*];
- Rogers' (2003 p. 138) model of the innovation-development process 'consists of all the decisions, activities, and their impacts that occur from recognition of a need or a problem [*needs/problems episode*], through research [*research episode*], development [*development episode*] and commercialisation [*commercialisation episode*] of an innovation, through diffusion and adoption of the innovation by users [*diffusion and adoption episode*], to its consequences [*consequences episode*];
- Rogers' (2003 pp 170-174) model of the innovation-decision process describes the 'process through which an individual (or other decision-making unit) passes from first knowledge of an innovation [*knowledge/research episode*] to forming a favourable or unfavourable attitude to the innovation [*persuasion episode*], followed by a decision to adopt or reject [*decision episode*], then implementation and use of the new

idea [*implementation episode*], and finally confirmation of this decision [*confirmation episode*];

- Rogers' (2003 p. 421) model of the innovation-adoption process 'identifies the main sequence of decisions, actions, and events in the [adoption of innovations]'. It has an initiation phase 'consisting of information gathering, conceptualisation, and planning for the adoption of innovation, leading up to the decision to adopt' [*agenda-setting and matching episodes*]. It also has an implementation phase 'consisting of all the events, actions, and decisions involved in putting the innovation into use' [*modification; clarifying and routinising episodes*] (Rogers, 2003 p. 421).

A description of the episodes in each model can be seen in Table 2–3 on page 31. These descriptions are later drawn upon to describe the anticipated episodes that may occur in the process of adoption of management innovation.

Taking the content of these episodes from the five models together it can be seen that many are similar, despite different labels. Those episodes that are similar are colour-coded in Figure 2–1 on page 36.

Anticipated episodes that may occur in each phase of the process of adoption of management innovation can be seen in Table 2-4 on page 37.

Table 2–3: A description of episodes as they appear in the literature

1. BIRKINSHAW & MOL (2006 pp 82-86): MANAGEMENT INNOVATION GENERATION MODEL			
<p>DISSATISFACTION WITH THE STATUS QUO</p> <p>‘The internal problem that management innovation addressed was always some level of dissatisfaction with the status quo within the company’ (p. 82)</p>	<p>INSPIRATION (USUALLY FROM OUTSIDE)</p> <p>‘Management innovators [...] need inspiration, such as examples of what has worked in other settings, analogies from different social systems or unproven but alluring new ideas’ (p. 84)</p>	<p>INVENTION</p> <p>‘The management innovator brings together the various elements of a problem (that is, dissatisfaction with the status quo) with the various elements of a solution (which typically involves some inspiration from outside, plus a clear understanding of the internal situation and context)’ (p. 85)</p>	<p>INTERNAL AND EXTERNAL VALIDATION</p> <p>‘Innovation involves risk and uncertain returns [...]. It is impossible to predict accurately whether any innovation’s benefits will exceed its costs until the innovation has been tried. A critical stage in the process, then, is for the management innovators to generate validation for their new idea’ (p. 86)</p>

2. BIRKINSHAW, HAMEL & MOL (2008 pp 833-837): MANAGEMENT INNOVATION GENERATION MODEL

MOTIVATION	INVENTION	IMPLEMENTATION	THEORISING AND LABELLING
<p>'The motivation phase refers to the preconditions and facilitating factors that lead individuals in a company to be motivated to experiment with a new management innovation' (p. 833)</p>	<p>'Invention refers to either random or planned variations in management practices. It is the phase in which a hypothetical new practice is first tried out in an experimental way' (pp 834-835)</p>	<p>'The implementation phase consists of all the activity on the "technical" side of the innovation after the initial experiment up to the point where the new management innovation is first fully operational' (p. 836)</p>	<p>'Theorisation and labelling is a social process whereby individuals inside and outside the organisation make sense of and validate the management innovation to build its legitimacy' (p. 831). 'Theorisation is therefore first about building a logical rationale for the link between an organisation's opportunities and the innovative solution that is being put in place, and second about expressing that logic in terms that resonate with key constituencies inside or outside the organisation. Labelling refers to the selection of a name for the management innovation in question that reflects its theorisation' (p. 837)</p>

3. ROGERS (2003 pp 137-157): INNOVATION-DEVELOPMENT MODEL

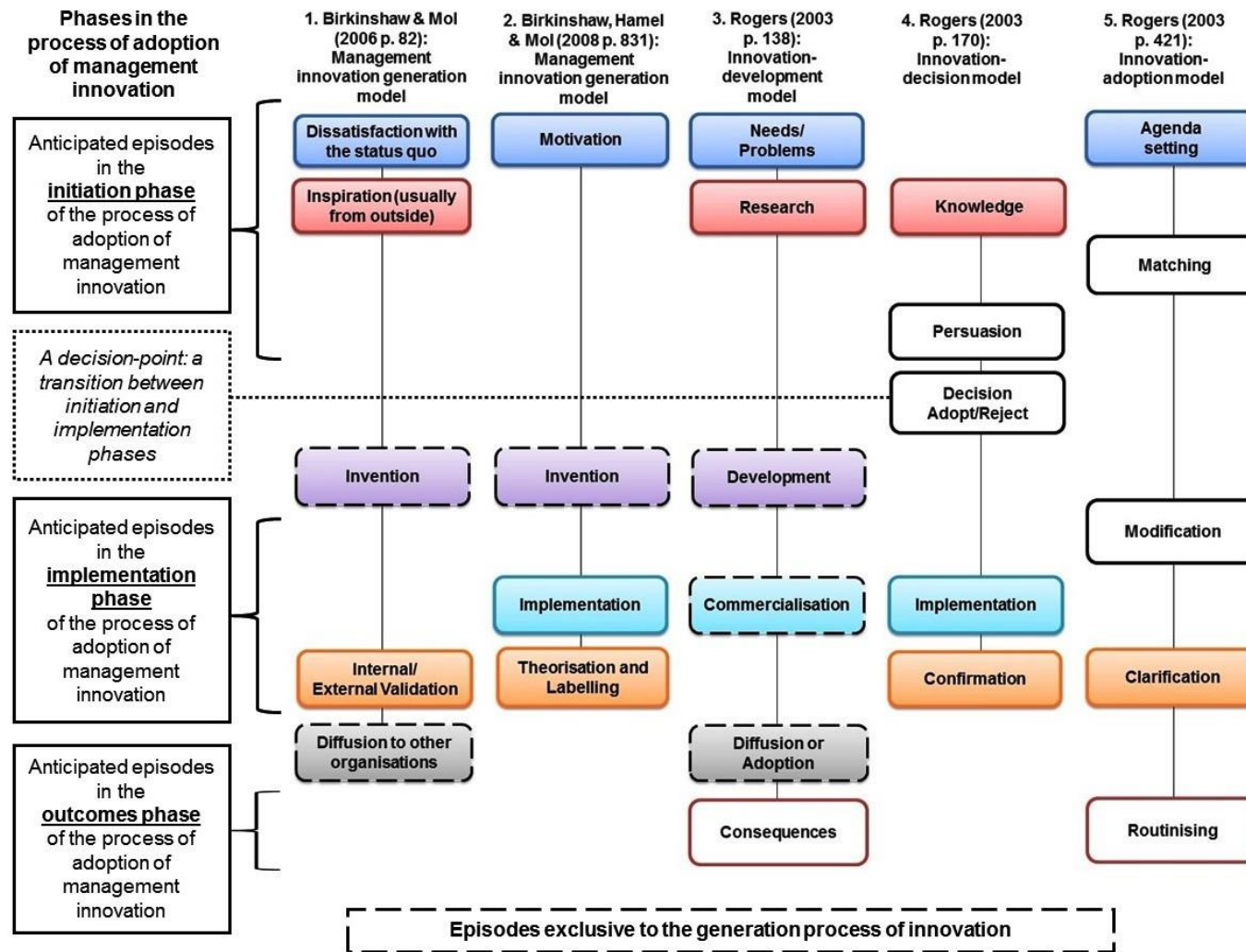
NEEDS OR PROBLEMS	RESEARCH	DEVELOPMENT	COMMERCIALISATION	CONSEQUENCES
<p>The 'recognition of a problem or need, which stimulates research and development activities designed to create an innovation to solve the problem or need' (p. 137)</p>	<p>Undertaking 'basic research i.e. the advancement of scientific knowledge' or 'applied research [...] intended to solve practical problems' (p. 140)</p>	<p>'Putting a new idea in a form that is expected to meet the needs of an audience of potential adopters' (p. 146)</p>	<p>'The production, manufacturing, packaging, marketing, and distribution of a product that embodies an innovation' (p. 152)</p>	<p>'The changes that occur to an individual or social system as a result of the adoption or rejection of an innovation' (p. 157)</p>

4. ROGERS (2003 pp 171-189): INNOVATION-DECISION MODEL

KNOWLEDGE	PERSUASION	DECISION	IMPLEMENTATION	CONFIRMATION
<p>When an individual/s 'is exposed to an innovation's existence and gains an understanding of how it functions' (p. 171)</p>	<p>The individual/s 'forms a favourable or unfavourable attitude toward the innovation' (p. 174)</p>	<p>(ADOPT OR REJECT) When an individual/s 'engages in activities that lead to a choice to adopt or reject an innovation' (p. 177)</p>	<p>When an individual/s 'puts an innovation to use' (p. 179)</p>	<p>The individual/s (seeks reinforcement for the innovation-decision already made' (p. 189)</p>

5. ROGERS (2003 pp 421-427): INNOVATION-DEVELOPMENT MODEL				
AGENDA-SETTING	MATCHING	MODIFICATION	CLARIFYING	ROUTINISING
‘A general organisational problem is defined that creates a perceived need for an innovation’ (p. 421)	‘A problem from the organisation’s agenda is fit with an innovation, and this match is planned and designed. Such planning entails anticipating the benefits, and the problems, that the innovation will encounter when implemented’ (p. 423)	‘The innovation is modified and re-invented to fit the organisation, and organisational structures are altered’ to fit the innovation (p. 421)	‘The relationship between the organisation and the innovation is defined more clearly’ (p.421). The meaning of the innovation gradually becomes clearer to the organisation’s members (p. 427)	‘The innovation becomes an ongoing element in the organisation’s activities, and loses its identity’ (p. 421)
INITIATION ACTIVITIES		IMPLEMENTATION ACTIVITIES		

Figure 2-1: A comparison of phases and episodes in five innovation models



Source: original

Table 2–4: Anticipated phases and episodes in the process of adoption of management innovation

Phases	Terms used as labels for episodes in the analysis chapters 4, 5 and 6	Episodes that appear in the five processes of innovation (see Figure 2–1) that have similar content.
Initiation (Phase 1)	Agenda-setting	Dissatisfaction with the status quo (Birkinshaw & Mol, 2006)
		Motivation (Birkinshaw, Hamel & Mol, 2006)
		Needs/problems (Rogers, 2003)
		Agenda-setting (Rogers, 2003)
	Knowledge/ research	Inspiration (Birkinshaw & Mol, 2006)
		Research (Rogers, 2003)
		Knowledge (Rogers, 2003)
	Matching	Matching (Rogers, 2003)
	Persuasion	Persuasion (Rogers, 2003)
	Implementation (Phase 2)	Modification
Operationalisation		Implementation (Birkinshaw, Hamel & Mol, 2008; Rogers; 2003)
Clarification/ confirmation		Internal and external validation (Birkinshaw & Mol, 2006)
		Theorisation and labelling (Birkinshaw, Hamel & Mol, 2008)
		Confirmation (Rogers, 2003)
Clarifying (Rogers, 2003)		

Outcomes (Phase 3)	Routinisation	Routinisation (Rogers, 2003)
	Discontinuance	Disenchantment/dissatisfaction or replacement (Rogers, 2003)

Source: original

The terms used in Table 2–4 on page 37 to label anticipated episodes in the process of adoption of management innovation are primarily drawn from Rogers' (2003) innovation-decision and innovation-adoption models. There are three exceptions: (1) in the implementation phase the label 'operationalisation' is used instead of 'implementation'; (2) in the implementation phase the label 'clarification' is used instead of 'clarifying'; and (3) in the outcomes phase the label 'discontinuance' is used instead of 'consequences'.

This next section of this literature evaluation provides an overview of the episodes that may occur in three phases of the adoption process of management innovation: (1) initiation; (2) implementation; (3) outcomes. Although this section is presented in a linear fashion, the process is regarded as non-linear. In practice, the episodes may appear in no particular sequence. For example, there may be a need to seek inspiration for information that might help solve implementation problems. There may also be a need to reset the agenda for management innovation in view of external or internal contextual changes that change agents have no control over.

2.3.2.1 Episodes in the initiation phase of the process of adoption

An initiation phase consists of all episodes that lead up to the decision to adopt (Rogers, 2003 p. 421). It is anticipated that there will be four episodes in this initiation phase: agenda-setting (including dissatisfaction with the status quo; motivation; needs/problems); knowledge/research (including inspiration); matching; and persuasion as shown in Table 2–4.

In the agenda-setting episode of the initiation phase there may be some form of 'dissatisfaction with the status quo' within the company (Birkinshaw & Mol, 2006 pp 82 & 83). Research conducted by Birkinshaw & Mol (2006 p. 81) highlights that the source of this dissatisfaction can be: (1) an external threat or crises; or (2) an internal operational problem. These various threats, crises, or problems can be expressed as organisational needs/problems that should be resolved (Rogers, 2003 p. 138). These organisational needs/problems represent a performance gap (Rogers, 2003 p. 422). This is defined as 'a perceived shortfall between the organisations current and potential performance' (Birkinshaw et al, 2008 p. 833). Alternatively, existing opportunities to improve the organisation or environmental changes may prompt organisational change (Birkinshaw et al, 2008 p. 833). The identification and prioritisation of needs/problems sets the agenda for organisational change through innovation (Rogers, 2003).

In the knowledge/research episode of the initiation phase organisations may seek inspiration for new management ideas to address this perceived performance gap (Birkinshaw & Mol, 2006). Birkinshaw and Mol (2006 p. 81) found that organisations seek inspiration from various sources such as management consultants or other organisations, but rarely from within the same industry. Inspiration may take the form of problem-driven research (Birkinshaw et al, 2008 p. 835) to gain: 'awareness-knowledge' of management innovations that may exist; 'how-to knowledge' of how the management innovation works; and 'principles-knowledge' of why the management innovation works the way it does (Rogers, 2003 p. 172). It is also possible that an organisation may become aware of an innovation by chance (Rogers, 2003 p. 171). When this occurs

management innovation may lead to the identification of organisational needs/problems to be addressed.

A matching episode of the initiation phase involves the selection of a management innovation to match the agenda for organisational change (Rogers, 2003). This match has to be planned and designed (Rogers, 2003 p. 423). Rogers (2003) suggests that such planning includes 'anticipating the benefits, and the problems, that the innovation will encounter when implemented' (Rogers, 2003). One issue to consider is the vast number of people involved in innovation processes (Newell et al; 2009; Rogers, 2003; Van de Ven, 1996). There may be different people involved at different phases in the adoption of management innovation. For example, people who make decisions to adopt in the initiation phase are not necessarily the same people involved in the implementation phase (Rogers, 2003 p. 179). The different external and internal networks that may influence the process of adoption of management innovation will be explored in more detail in section 2.5.2 on page 64.

In the persuasion episode of the initiation phase involves individuals forming 'a favourable or unfavourable attitude toward the innovation' (Rogers, 2003 p. 174). Attitudes may be formed by seeking information about the management innovation and considering the legitimacy of proposals to adopt it (Rogers, 2003). Rogers (2003 pp 229-258) found that 'perceived attributes of innovation' and Greenhalgh, Robert, MacFarlane, Bate and Kyriakidou (2004 p. 606) that 'system readiness for innovation' (Greenhalgh et al, 2004) influence decisions to adopt or reject innovations. Figure 2–2 on 43 shows that when the perceived attributes of innovation is high, decisions are more likely to be made to adopt management innovation. In contrast, when the perceived attributes of innovation is low, decisions are less likely to be made to adopt and modify management innovation. Figure 2–2 also shows that when an organisation has a high degree of system readiness for innovation, decisions are more likely to be made to adopt management innovation. In contrast, when an organisation has a low degree of system readiness for innovation, decisions are less likely to be made to adopt management innovation. This suggests that a low degree of

perceived attributes of innovation and system readiness for innovation increases the chance that management innovation will be rejected.

An evaluation of the descriptions offered in Figure 2–2 suggests that: relative advantage and tension for change; compatibility and innovation-system fit; complexity and assessment of implications; and observability and capacity to evaluate the innovation are inter-related. For example, (1) the perceived relative advantage of an innovation may be high when there is a high degree of tension for change, or vice versa; (2) the perceived compatibility of an innovation may be high when there is a high degree of innovation-system fit, or vice versa; and (3) the perceived observability of an innovation may be high when there is a high capacity to evaluate the innovation, and vice versa. Therefore, a high degree of interrelatedness between perceived attributes of innovation and system readiness for innovation may influence decisions to adopt management innovation.

An outcome of the persuasion episode in this initiation phase is a decision to adopt or reject a management innovation. Following a decision to adopt, a 'transition' (Gopalakrishnan & Damanpour, 1994 p. 100) is made from the initiation phase to the implementation phase in the adoption of management innovation (Rogers, 2003).

Figure 2–2: Perceived attributes of innovation and system readiness for innovation

	PERCEIVED ATTRIBUTES OF INNOVATION		SYSTEM READINESS FOR INNOVATION	
LESS LIKELY TO BE ADOPTED AND MODIFIED	<p>Relative advantage: The degree to which an innovation is perceived as being better than the idea it supersedes.</p>	MORE LIKELY TO BE ADOPTED AND MODIFIED	<p>Tension for change: The degree to which the current situation is intolerable.</p>	LESS LIKELY TO BE ADOPTED AND MODIFIED
	<p>Compatibility: The degree to which an innovation is perceived as consistent with [existing informal and formal organisational structures] and the needs of potential adopters.</p>		<p>Innovation-system fit: The degree to which an innovation fits with an organisations [existing informal and formal organisational structures].</p>	
	<p>Complexity: The degree to which an innovation is perceived as relatively difficult to understand and use.</p>		<p>Assessment of implications: The degree to which the implications of the innovation, including its subsequent effects, are fully assessed and anticipated.</p>	
	<p>Observability: The degree to which the results of an innovation are visible to others.</p>		<p>Capacity to evaluate the innovation: The degree to which the organisation has appropriate systems and skills in place to monitor and evaluate the impact of the innovation.</p>	

	<p style="text-align: center;">Trialability:</p> <p style="text-align: center;">The degree to which an innovation may be experimented with on a trial basis.</p>		<p style="text-align: center;">Dedicated time and resources:</p> <p style="text-align: center;">The degree to which the allocation of resources is both adequate and continuing.</p>	
			<p style="text-align: center;">Support and advocacy:</p> <p style="text-align: center;">The degree to which the supporters of the innovation outnumber and are more strategically placed than its opponents.</p>	
	<p style="text-align: center;">Sources: Rogers, 2003 pp 265-266; Mamman pp 46-47.</p>		<p style="text-align: center;">Source: Greenhalgh, Robert, Macfarlane, Bate & Kyriakidou, 2004 p. 608.</p>	

2.3.2.2 Episodes in the implementation phase of the process of adoption

The implementation phase (the second phase of the three in total) consists of 'all [episodes] and decisions involved in putting an innovation into use' (Rogers, 2003 p. 421). It is anticipated that there will be three episodes in this implementation phase: modification; operationalisation; and clarification/confirmation as shown in Table 2–4 on page 25.

In the modification episode of the implementation phase management innovations selected for implementation may be modified (Rogers, 2003). A modification episode aims 'to make an idea workable' to either 'achieve the goals for which they are adopted' or to 'suit the context of the organisation' (Mamman, 2002 p. 385). Mamman (2002; 2009) found that 'perceived attributes of innovation' influences decisions to modify management innovation. Where the perceived attributes of innovation (relative advantage; compatibility; complexity; observability; and trialability) is high, decisions are less likely to be made to modify management innovation. In contrast, where the perceived attributes of innovation is low, decisions are more likely to be made to modify management innovation. Mamman (2002 p. 385; 2009 p. 41) proposes that management innovations can be modified by: (1) addition (adding components to the original idea); (2) omission (omitting components from the original idea); (3) substitution (substituting components of the original idea with alternative components from other ideas); and (4) hybridisation (merging two distinct ideas together to form a new original idea).

Research into modification has found that management innovations will not necessarily have the same degree of 'modifiability' (Mamman, 2009 p. 42). This refers to the degree to which management innovations can be modified and extended across organisational boundaries or hierarchies (Mamman, 2009 p. 42). Mamman (2009 p. 45) found that management innovations that are 'malleable' can be modified and 'extended horizontally across organisational boundaries'. These management innovations will retain their core structure and identity following modification because they are adopted at the same level across organisational boundaries (Mamman, 2009). Management innovations that are 'ductile' can be modified and 'extended vertically across organisational hierarchy' (Mamman, 2009 p. 45). These management innovations are more likely to be radically modified to suit different levels of organisational hierarchy, and will therefore not retain their core structure and identity (Mamman, 2009). This suggests that malleable management innovations cannot be extended vertically across organisational hierarchies, and ductile management innovations cannot be extended horizontally across organisational boundaries.

In the modification episode of the implementation phase 'not only is an innovation modified to fit the organisation, the structure of the organisation may be changed to accommodate the innovation' (Rogers, 2003 p. 424). Formal organisational structure includes: predetermined goals, prescribed roles and authority structure as often depicted in organisational charts; and rules and regulations in organisational policies, processes and procedures (Rogers, 2003 p. 404). The informal organisational structure refers to: (1) rules of signification (meaning) and legitimation (norms); and (2) resources of power (domination) in organisations that enables or constrains human behaviour (Giddens, 1984). These rules and resources make up the 'cultural soup' (Jashapara, 2011 p. 267) that people draw on when interacting. Rogers (2003) states that organisational structures should be compatible with the management innovation selected for adoption, and if not, then should be modified before attempting to operationalise the management innovation.

The operationalisation episode of the implementation phase begins when people actually start to put an innovation into use for the first time (Rogers, 2003 p. 179). Whilst not specifically writing within the context of management innovation, there is much literature of critical success factors or barriers to success, influencing the operationalisation of Knowledge Management (for example, (1) Akhavan, Mostafa & Mohammad, 2006; (2) Anantatmula & Kanungo; 2010; (3) Bishop, Bouchlaghem, Glass & Matsumoto, 2008; (4) BSI, 2005; (5) Chua & Lam, 2005; (6) Conley, 2009; (7) Park, Rebière & Schulte, 2004; (8) Reige, 2005; (9) Valmohammadi, 2010; (10) Wong, 2005).

The authors above mention the following critical success factors:

- Organisational factors:
 - Organisational structure (3; 6; 9)
 - Organisational culture and climate (1; 5; 8; 7; 9; 10)
 - Management or leadership support (1; 2; 4; 5; 6; 9)
- Human resource factors:
 - Staff time commitment (4; 8; 9)
 - Staff training and education (1; 6; 9; 10)
 - Staff motivation, incentives and rewards (3; 6; 9)
- Project management factors:
 - Strategy and vision (1; 3; 9)
 - Strategic focus (codification/personalisation) (1; 4)
 - Budgetary support (2)
 - Specialist staff (3)
 - Staff expertise (5)
 - User involvement (4; 5)
 - Pilot before roll-out (1; 4)
 - Measurement of results (2; 4; 6)
- Content factors:
 - Quality, relevance, and currency (2; 5)

Research shows that there is general agreement that an organisation's culture can inhibit Knowledge Management implementation. Some authors suggest that Knowledge Management implementation should be compatible with the existing culture of the organisation (Wiig, 1997; McDermott and O'Dell, 2001; Syed-Ikhsan & Rowland, 2004; Alavi & Leidner, 2006). Other authors suggest that if an appropriate organisational culture does not already exist it has to be nurtured or adapted prior to Knowledge Management implementation (Park, Ribiere, & Schultze, 2004; Walczak, 2005). In these views culture is an antecedent to Knowledge Management implementation. Culture change (if required) should precede the introduction of Knowledge Management. Other research suggests that information technologies can facilitate culture change (the case study on Buckman Labs in Swan et al, 2009 is a prime example). These different views suggest that: (1) culture change should take place before a personalisation strategy is introduced; and (2) culture change can take place through a codification strategy. The choice of strategy therefore influences whether culture change should take place before, or take place after, implementing Knowledge Management.

In the clarification/confirmation episode of the implementation phase clarification and confirmation will be sought to continue adopting the innovation (Rogers, 2003). This involves 'seeking reinforcement for the innovation-decision already made' (Rogers, 2003 p. 169). Some perceived attributes of innovation may help clarify 'the relationship between the organisation and the innovation' (Rogers, 2003 p. 427). For example, a high degree of relative advantage; compatibility; and observability will help clarification. In contrast, a high degree of complexity will make the management innovation more difficult to understand, thereby reducing clarification. It is also anticipated that some system readiness for innovation factors such as the organisation's capacity to evaluate the innovation may aid the assessment of implications and innovation-system fit of management innovation. If confirmation is not satisfactory, a decision may be made to discontinue use (Rogers, 2003 pp 190 & 442).

Birkinshaw & Mol (2006) research has found that organisations seek and generate external and internal validation to help clarify the meaning of, and confirm the benefits of management innovation (Birkinshaw & Mol, 2006). Birkinshaw and Mol (2006 pp 86-87) identified four means of acquiring external validation: (1) the business school academic who typically codifies practice for use in either research or teaching; (2) the management consultant who codifies practice for use in alternate organisational settings; (3) the media representative who codifies practice for diffusion to wider audiences; and (4) industry associates who share codified practice at external events.

This research also found that internal champions' propensity to seek early victories helped secure internal validation (Birkinshaw & Mol, 2006). In subsequent research Birkinshaw et al (2008 p. 836) found that another way internal champions achieve internal validation was focusing operationalisation 'efforts on those parts of the organisation that are more amenable to [and supportive of] change'. Birkinshaw et al (2008 p. 831) found that internal champions involved in theorising and labelling helped validate the legitimacy of management innovation. They define theorising as: (1) 'building a logical rationale for the link between an organisation's [agenda] and the innovation solution that is put into place'; and (2) 'expressing that logic in terms that resonate with key constituencies inside or outside the organisation' (Birkinshaw et al, 2008 p. 837). Birkinshaw et al (2008 p. 837) also found that internal champions' 'selection of a name for management innovation that reflects its theorising' helps build its legitimacy. The correct choice of labelling is also reported to have a positive influence on the operationalisation of innovation (Rogers, 2003 p. 250).

A choice to continue adoption of management innovation marks a 'transition' (Gopalakrishnan & Damanpour, 1994 p. 100) from the implementation phase to the outcomes phase.

2.3.2.3 Episodes in the outcomes phase of the process of adoption

The outcomes phase is the third (and final) phase of the process of adoption of management innovation. The outcomes phase, as shown in Table 2–4 consists of all activities involved in either: (1) routinising or incorporating the innovation into organisational routines; or (2) discontinuing adoption due to: (a) disenchantment or dissatisfaction with performance; or (b) replacement of the innovation with something better (Rogers, 2003 p. 138 & p. 190).

Research has found that innovations (in general) that have a high degree of sustainability will be routinised more quickly (Rogers, 2003 p. 183). Rogers (2003 p. 183) defines sustainability as the 'degree to which an innovation continues to be used over time after [operationalisation] ends'. Rogers (2003 p. 183) reports that a 'higher degree of [modification] leads to a higher degree of sustainability of an innovation'. Routinisation is less likely to occur if the innovation is not perceived to be compatible with the organisational agenda set for change, and the people adopting it do not regard it as theirs (Rogers, 2003 p. 376).

Research has shown that the outcome of the innovation process is uncertain and cannot be predetermined (Rogers, 2003; OECD & Eurostat, 2005; Cheng & Van de Ven, 1996; Swan et al, 2009). This is because the process of innovation is 'inherently uncertain, dynamic and random' (Cheng & Van de Ven, 1996 p. 593). Consequences of the innovation process can either be: desirable or undesirable; direct versus indirect; and anticipated versus unanticipated (Rogers, 2003 p. 442).

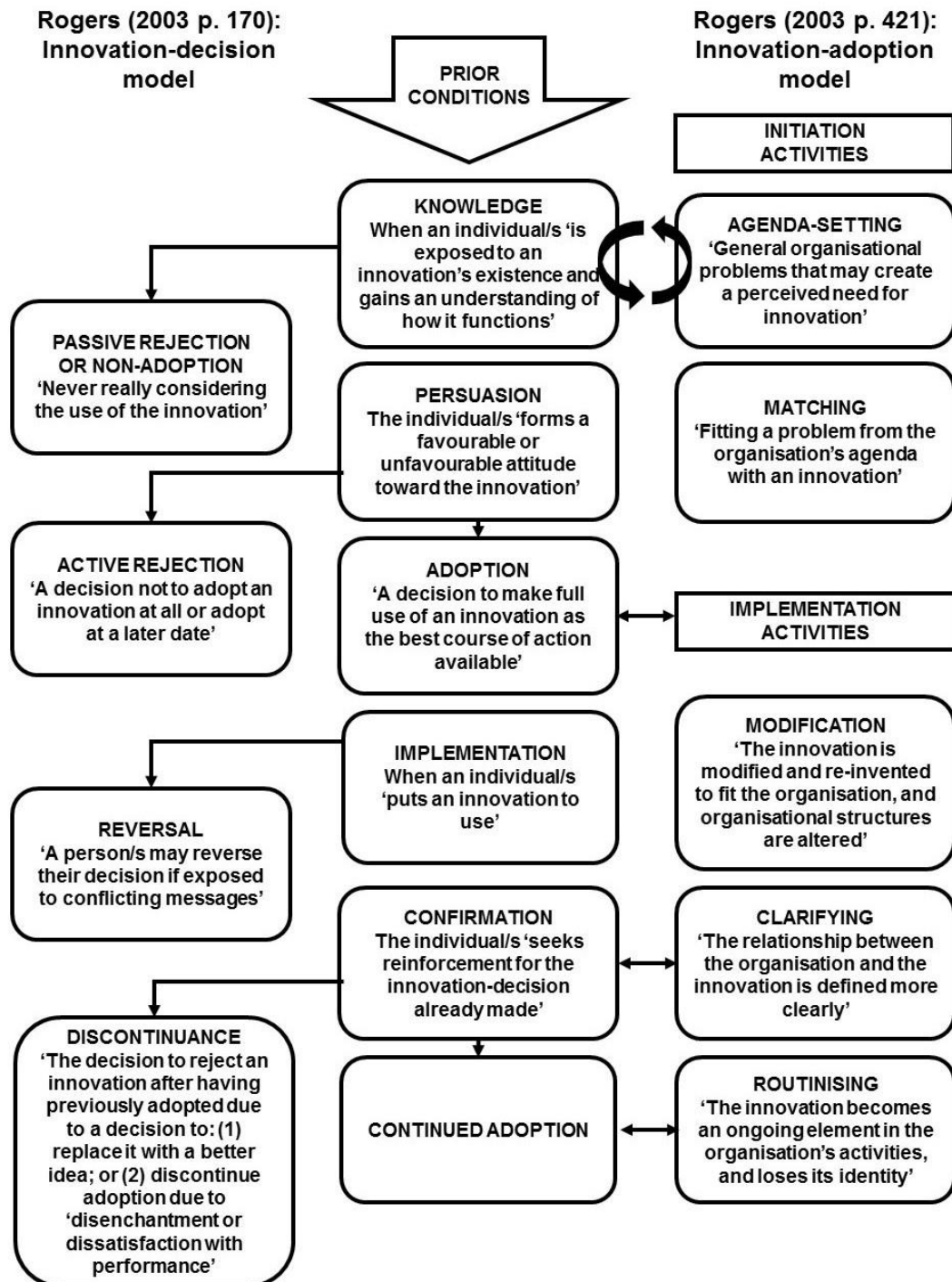
2.4 Decision-making in the process of adoption of management innovation

Decision-making (for example, decisions-between-alternatives; adoption/rejection decisions; and modification decisions) is discussed in the literature across all phases and episodes.

An evaluation of the management literature found that decisions frequently involve making choices between alternatives. This type of decision can be labelled 'decision-between-alternatives' (Rollinson, Broadfield & Edwards, 1999 p. 198). In the innovation literature Rogers (2003) mentions one such decision-between-alternatives: the decision to either adopt or reject an innovation. This type of decision can be labelled an 'adoption/rejection decision'. Rogers (2003) states that an adoption/rejection decision can take place at any point in the decision-making process. An adoption/rejection decision also represents a transition: (1) between the phases in the adoption process (or not); and (2) between the discontinuance and routinisation episodes (Rogers, 2003).

There are different types of rejection decisions. Figure 2–3 shows how Rogers (2003) innovation-decision model relates to the innovation-adoption model of innovations in organisations. The recursive cycle of agenda-setting and knowledge/research is not depicted in models but discussed by Rogers (2003 pp 171-172). It is therefore shown here. Figure 2–3 illustrates that there are different types of 'rejection'. These reflect decisions to: (1) passively reject or not consider adoption at all; (2) actively reject or postpone adoption; (3) reverse a decision to adopt; or (4) discontinue an innovation after implementation or even after routinisation has occurred (Rogers, 2003 p. 178).

Figure 2–3: The interrelationship between the innovation-decision and innovation-adoption model



Source: adapted from Rogers (2003 pp 170 & 421)

Four different types of adoption/rejection decisions people can make have been identified:

- *Authority innovation-decisions* where 'choices to adopt or reject an innovation are made by a relatively few individuals in a system who possess power, high social status, or technical expertise';
- *Optional innovation-decisions* where 'choices to adopt or reject an innovation are made by an individual independent of the decisions by other members of the social system';
- *Collective innovation-decisions* where 'choices to adopt or reject an innovation are made by consensus among the members of a social system';
- *Contingent innovation-decisions* 'are choices to adopt or reject that can be made only after a prior [optional, collective, or authority] innovation-decision' (Rogers, 2003 p. 403).

These different types of adoption/rejection decisions illustrates that a management innovation can be *adopted or rejected* by: senior staff in powerful positions; individual staff members; or a collective group or network of staff members.

It is anticipated that other types of decisions-between-alternatives will occur within the episodes of the process of adoption of management innovation. The literature evaluation presented above, as well as a review of the management innovation and Knowledge Management literature reveals that there are a number of decision-between-alternatives for consideration at a management innovation and task force level. These are shown in Table 2–5. The decisions highlighted in bold refer to recommendations found in the management innovation literature (Currie, 1999) and the Knowledge Management literature (BSI, 2005).

Table 2–5: Attributes of, and choices in, decision-making

Attributes of decision-making		Decision-between-alternatives (and/or decisions) for the adoption of management innovation. Recommendations from the literature (Currie, 1991; BSI, 2005) are highlighted in bold.	
Agenda for organisational change:	Aim of management innovation:	To further organisational goals (for example, facilitate organisational change)	To enhance firm performance (for example, improve organisational impacts)
Nature of organisational change:	Depth of organisational change:	Conceptual (deep) affecting organisational culture	Practical (shallow) affecting organisational practices
	Extent of organisational change:	Broad across all organisational functions	Narrow within one or more (but not all) organisational functions
	Direction of organisational change:	Top-down direction of change from experts to local users	Bottom-up direction of change from local users to peers
Type of adoption of management innovation:	Strategy of management innovation:	Personalisation (people-focused) strategy	Codification (technology-focused) strategy
	Approach to management	Push innovation-centred approach focusing on identifying	Pull problem-centred approach focusing on identifying local

	innovation adoption:	needs/problems of potential users of an available innovation	needs/problems to address through a potential management innovation
Nature of adoption of management innovation:	Participation in management innovation adoption:	Mandatory where participants do not have a choice to adopt or reject a management innovation	Voluntary where participants have a choice to adopt or reject a management innovation
	Degree of modifiability of management innovation:	Ductile management innovations that can extend vertically across organisational hierarchy	Malleable management innovations that can extend horizontally across organisational boundaries
	Operationalisation of management innovation:	Trial experimentation with a few potential users first	Full roll-out to all potential users
Means of implementing management innovation:	Resources required to adopt management innovation:	Using a task force to operationalise management innovation	Using individuals or groups of people who may not require specialist skills to operationalise management innovation
		Decisions-between-alternatives (and/or decisions) for task forces. Recommendations from the literature (BSI, 2005) are highlighted in bold.	
Implementing a	Location of task force:	Staff are co-located in a single	Staff are distributed across the

task force:		team in one location	organisation in different locations
	Management of task force:	Centralised management by a single central unit	Management decentralised to local adopting units
	Competence of task force:	Staff have technical skills	Staff have social skills
	Remit of task force:	A remit that is recreated and continuously changes	A remit that is static and does not change
	Approach of task force:	Service approach: initiate management innovation activities in conjunction with staff, develop and pilot them, then transfer ownership to staff members for delivery and maintenance	Co-ordination approach: Co-ordinate implementation of management innovation activities, including those chosen, owned and maintained by staff located in different functions or locations

Sources: adapted from Birkinshaw, Hamel & Mol (2005); BSI (2005); Currie (1999); Mamman (2002 & 2009); Mol & Birkinshaw (2009); Rogers (2003).

The innovation literature suggests that some of these choices will be interrelated. For example, research conducted by Currie (1999) suggests that a decision to implement a malleable innovation (that extends across organisational boundaries) for use by all staff members (a push innovation-centred strategy) will require management to drive adoption (a top-down direction of change).

It is anticipated that the different types of decisions (for example, types of decisions-between-alternatives; adoption/rejection decision types; modification decision types; and rejection decision types) will occur across phases in the process of adoption of management innovation. Table 2–6 on page 54 maps these decisions against anticipated episodes in the process of adoption of management innovation identified previously (see Table 2–4 on page 37). The positioning of these decision types is based on the findings in the literature presented in this section.

Table 2–6: Decisions types that may be found across the process of adoption of management innovation

	Decisions-between-alternatives		Adoption/rejection decision types (Rogers, 2003)				Modification decision types (Mamman, 2002; 2009)				Rejection decision types (Rogers, 2003)			
	Adoption or rejection	Other decision types	Authority	Optional	Collective	Contingent	Addition	Omission	Substitution	Hybridisation	Passive rejection	Active rejection	Reversal rejection	Discontinue adoption
Anticipated episodes in the process of adoption of management innovation, and transition points between phases.														
Agenda-setting	✓	✓	✓	✓	✓						✓			
Knowledge/ research	✓		✓	✓	✓						✓			
Matching	✓	✓	✓	✓	✓							✓		
Persuasion	✓		✓	✓	✓							✓		
<i>Transition between phases</i>	✓		✓	✓	✓	✓								
Modification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Operationalisation	✓	✓	✓	✓	✓								✓	
Clarification/ confirmation	✓		✓	✓	✓									✓

<i>Transition between phases</i>	✓		✓	✓	✓	✓								
Routinisation	✓		✓	✓	✓	✓								
Discontinuation	✓	✓	✓	✓	✓	✓								✓

Source: original

2.5 Contextual factors influencing the process of adoption of innovation in general

The factors that influence the process of adoption of innovation (in general) in organisational settings all relate to an organisation's external and internal context (Damanpour, 1991). Innovation often occurs as a result of changes in the external context in which an organisation operates, or a desire to change the internal context of an organisation (Damanpour, 1991 p. 556). The internal contextual factors that influence the process of adoption of innovation will be discussed under: (1) the organisational setting for innovation; (2) internal networks involved in the innovation process; (3) internal power and conflict in the innovation process; and (4) the internal ambition of innovation and change. The external contextual factors influencing the innovation process includes: (1) external networks; and (2) power and conflict.

2.5.1 The organisational setting as influencing contextual factors

The process of adoption of innovation (in general) takes place in organisational settings with different structures. In his research, Mintzberg (1980) identified five types of organisational structures: simple structure; machine bureaucracy; professional bureaucracy; divisionalised form; and adhocracy. Organisations may change their formal organisational structure from one to another, or even exhibit hybrid-structures as they are influenced by, and adapt to, environmental changes (Rogers, 2003). These formal structures reflect different types of organisation (for example, small or large, young or old) and nature of environment they operate in (for example, simple or complex). These formal structures also differ in: mechanisms to coordinate work (organic versus mechanistic); and types of decision-making (centralised or decentralised). The informal structures (or type of culture: power, role, person, competitive or task) typically associated with these formal organisational structures have been identified (for example, Lam, 2004). The differences in these formal organisational structures, as well as their capacity to innovate are summarised in Table 2–7.

Table 2–7: Types of organisational structures and organisations capacity to innovate

	Type of formal organisational structure				
	Simple	Machine Bureaucracy	Professional Bureaucracy	Divisionalised	Adhocracy
Type of organisation and nature of environment they operate in	Typically small and young organisations (for example, start-up firms) operating in simple and dynamic environments.	Typically old and large organisations (for example, mass production firms) operating in simple and stable environments.	Organisations of variable sizes and ages (for example, consultancy, accountancy or law firms) operating in complex and stable environments.	Typically old and very large organisations (for example, hospitals) operating in simple and stable environments.	Typically young organisations of variable size (for example, software engineering firms) operating in complex and dynamic environments.
Informal (organic) and formal (mechanistic) mechanisms used to coordinate	Organic coordination through direct supervision of staff.	Mechanistic coordination through standardisation of work processes through standards (e.g. policies and procedures) that	Mechanistic coordination through standardisation of individual's competence, which may be regulated by external professional	Mechanistic coordination through standardisation of outputs in the form of standard performance measures.	Organic coordination through normative self-management characterised by collaboration and communication.

work		guide the work itself.	bodies.		
Centralised or decentralised decision-making	Minimal hierarchy with centralised and informal decision-making in small functional unit/s.	Multiple level hierarchy with centralised decision-making and little decentralised decision-making in functional units.	Multiple level hierarchy with decision-making decentralised to professionals in functional and/or market-based units.	Multiple level hierarchy with decision-making decentralised to semi-autonomous market-based units.	Minimal hierarchy with decision-making selectively decentralised to project teams in functional or market-based units.
Type of culture (or informal) organisational structure	A power culture where a person or small group of people may be more concerned about ends rather than means.	A role culture where rules, procedures and job descriptions tend to predominate.	A person culture characterised by individual autonomy and collective action based on fulfilling individual self-interests.	A competitive culture where performance outputs and impacts predominate.	A task culture characterised by competence, where mutual respect is based on ability rather than status or age.
Capacity to innovate	Entrepreneurial, highly innovative and reactive to environmental	Designed for efficiency and stability so are highly rigid and	Individual experts may be highly innovative within their specialised	May be innovative in local domains, niches or locations. Competition between	Highly adaptive and innovative as project teams can be rapidly reconfigured in

	changes. Innovation may be limited by high turnover of staff due to power culture, or limited resources such as finance.	unable to cope with novelty and change.	domains. A variety of functions and disciplines may limit organisational innovation as a whole.	divisions may inhibit innovation across the organisation.	response to external changes and market demands.
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Sources: adapted from Mintzberg (1980 pp 322-341); Handy (1985 pp 272-273); Jashapara (2011); Lam (2004 p. 9); Newell, Robertson, Scarborough & Swan (2009 p. 36).

Of interest here are the different styles of internal organisation that influences the process of adoption of management innovation. It is generally accepted that public sector organisations are more bureaucratic than their private sector counterparts (Abdulla & Hema, 2009; Boyne, 2002; Monavvarian & Kasei, 2007; Parker & Bradley, 2000; Syed-Ikhsan & Rowland, 2004). Bureaucratic organisation is characterised by: a high degree of centralisation (for example, central decision-making by few individuals); a high degree of formalization (for example, many formal rules and regulations); a low degree of interconnectedness (for example, a lack of communication and networking); and a low degree of organisational slack (for example, few resources that can be committed elsewhere) (Rogers, 2003 p. 412; Swan et al, 2009 p. 36). It has been found that these attributes of bureaucratic organisation are negatively associated with innovation (Rogers, 2003).

2.5.2 Networks as influencing contextual factors

The process of adoption of innovation (in general) is influenced by external and internal networks of people (Van de Ven, 1986; Newell et al 2009 p. 198). An evaluation of the literature (for example, BSI, 2005; Lamb & Kling, 2003; Powell & DiMaggio, 1991; and Thrift, 2005) identifies four external networks that can influence the process of adoption of management innovation:

- *A cultural network* (for example, media, consultants, academics and gurus) is typically associated with developing practices organisations can imitate leading to a mimetic strategy of adoption;
- *A regulatory network* (for example, authorities, councils, commissions or offices) is typically associated with imposing legal restrictions that regulates an organisation's operations leading to a coercive strategy of adoption;
- *An industry network* (for example, partners, competitors, or suppliers) is typically associated with influencing organisational conduct within industry norms. Organisations achieve legitimacy by defining their role and work within industry norms leading to a normative strategy of adoption;

- A *political network* (for example, stakeholders or shareholders) is typically associated with issuing political directives that govern an organisation's strategy, structure and operations leading to a political strategy of adoption.

Apart from these external circuits there are also a number of internal organisational networks that can influence the adoption of innovation:

- A *management network* typically comprises senior management, namely the Chief Executive Officer and Senior Managers (Baker, Gibbons & Murphy, 1999). Their responsibilities may include Knowledge Management, but they may not be Knowledge Management specialists themselves (Hall & Goody; 2007 p. 185);
- An *innovation network* may include a diverse range of people at different levels of the organisation that are brought together to seek inspiration for, and experiment with, new innovative ideas (Newell et al, 2009; BSI, 2005);
- A *practitioner network* may include people recruited for the sole purpose of implementing a management innovation;
- A *staff network* of "ordinary" staff across the organisation whose work contributes to Knowledge Management efforts' (Hall & Goody, 2005 p. 185).

These different collectives of actors illustrates that the adoption of management innovation is dependent on 'managing part-whole relationships' and requires the careful management of resources so that individuals involved take into account the whole innovation effort (Van de Ven, 1986 p. 592).

2.5.3 Power and conflict as influencing contextual factors

It has been noted that 'the political dynamics, interests and power bases can also considerably influence the innovation' (Jashapara, 2011 p. 109). Power, by nature, is relational (Giddens, 1984; Flyvbjerg, 2001; Foucault, 1980; Rollinson et al, 1999). It has been conceived as a 'multiplicity of force relations' that is exercised in 'relations of strength, tactics, and strategies' (Flyvbjerg, 2001 p. 120). Foucault (1980) emphasises the constitutive nature of power as the ability to produce reality and hence knowledge. In his view, power and knowledge are mutually constitutive in that 'power generates knowledge, and knowledge

generates power' (in Flyvbjerg, 2001 p. 131). Power can be negative and restrictive as well as positive and productive (Foucault, 1980; Kearins & Hooper, 2002; Flyvbjerg, 2001). Power can evoke negative effects such as domination or submission, but also positive effects such as obedience or collective action (Flyvbjerg, 2001 p. 120).

Research has found different sources (or bases) of power in organisational settings: positional; contextual; or personal (Rollinson et al, 1999 pp 378-382):

- A *positional base of power* is created when an organisation's structure establishes certain positions and practices. The people who take up these roles can exercise certain types of power (for example, reward, coercive, authoritative) using various means (for example, tactics) to make decisions, command actions, ensure compliance, or influence practice;
- A *contextual base of power* refers to the different contexts in which people can exercise power. A person will not necessarily have the same ability to exercise power in different contexts. Different situations thus confer different opportunities to exercise power;
- A *personal base of power* is when a person has strong personal attributes that allows them to exercise: power over others (for example, leadership qualities); and the power to achieve something (for example, experience and expertise).

These different bases of power (positional, contextual and personal) reflects: the 'power to' do something (for example, to reward, to compel, to command etc.); and the ability to employ different tactics to exercise 'power over' people (Rollinson et al, 1999). Research has shown that the exercise of 'power over' a person is dependent on their acquiescence to it (Jones & Karsten, 2008). For example, research by Yukl (1981) has shown that subordinates who are committed or compliant are more likely to comply with decisions or commands, whereas those that are resistant will not (in Broadfield et al, 1999 p. 389). In addition, power does not always flow in a top-down manner (for example, in positional bases of power) but also in a bottom-up or horizontal manner (for example, in contextual or personal bases of power) (Broadfield et al, 1999 p.

385). Power can therefore be exercised in numerous ways and through various means (or tactics). See Table 2–8.

Table 2–8: Different types and bases of power

Types of power	Power to...	Power over (<i>tactics</i>)
Positional bases of power		
Reward power	The power to reward people for complying with decisions or commands, or performing well.	<i>Bargaining</i> with people by negotiating and offering tangible or intangible rewards they desire or want.
Coercive power	The power to compel people to do something, or behave in a particular way.	Introducing <i>sanctions</i> such as removing organisational rewards, or introducing organisational punishments for non-compliance with decisions.
Legitimate power	The power (or authority) to make decisions or command others to do something.	Using <i>assertiveness</i> to issue direct instructions to comply with commands, or gaining support or backing from someone with <i>higher authority</i> before issuing commands.
Contextual bases of power		
Network power	The power to build networks to ‘stay in the know’, trade favours, and enlist support from other people.	Building up <i>coalition alliances</i> with other people, or networking to identify where favours can be exchanged.
Information power	The power to control the flow of information.	Becoming <i>information gatekeepers</i> to restrict the flow of information.
Resource power	The power to control the allocation of resources.	Acquiring surplus resources or hoarding and hiding resources.
Hidden power	The power to covertly influence discussion and working practices, or prevent the emergence of conflict.	Shaping the terms on which matters will be discussed; developing or changing working practices to suit individual agendas; or suppressing conflict.

Personal bases of power		
Referent power	The power to influence other people's behaviour or practice.	Being a point of <i>reference</i> or role model for people.
Expert power	The power to advise and help people, or undertake skilled positions.	Developing and demonstrating <i>personal competence</i> (for example, education; skills; experience; or knowledge).

Source: adapted from Rollinson, Broadfield & Edwards, 1999 pp 378-387

The legitimate power (or authority) to make decisions or command others is distributed throughout organisations. Structural authority is solely reserved for those actors at the top of the hierarchical structure, namely the Chief Executive Officer and Senior Managers (Baker, Gibbons & Murphy, 1999). However, authority can be delegated to various members of staff within an organisation. For example, line authority is delegated to managerial staff who make decisions regarding the work of subordinates (Etzioni, 1959). Other forms of authority that do not extend to decision-making are staff and cognitive authority. Staff authority is the domain of expert or specialist staff whose role is primarily an advisory role (Etzioni, 1959). Cognitive authority refers to the belief that an actor is knowledgeable on his or her subject area (Wilson, 1982). Both staff and cognitive authority correspond to expert power, a personal base of power.

In organisations conflict is considered inevitable (Rollinson et al, 1999 p. 401). Research has shown that sources of conflict include: organisational structure and design decisions; personal factors (for example, values, beliefs, perceptions and personalities); cultural factors (for example, organisational norms and competitive cultures); and communication factors (for example, problems in interpreting meaning, a lack of information or information overload; and use of inappropriate channels to communicate) (Rollinson et al, 1998 pp 404-406).

In organisations staff have the power to induce conflict and the power to suppress conflict (Deetz, 2007). In his research Deetz (2007 pp 465-469) identified various ways in which conflict is suppressed through communication:

- '*Disqualification* is the process by which individuals are excluded' through various means such as 'denying the people the right to speak [...] or speak adequately, [or] through processes of deskilling';
- *Topical avoidance* is the process by which a person or 'social group prohibits or discourages the discussion of some events and feelings';
- '*Neutralization* refers to the process by which value positions become hidden and value-laden activities are treated as if they were value-free';

- '*Meaning denial* happens when one possible interpretation of a statement is both placed in the interaction and denied as meant';
- '*Legitimation* appears in the rationalization of decisions and practices through the invocation of higher order explanatory devices';
- '*Pacification* describes the process by which conflictual discussion is diverted or subverted through an apparently reasonable attempt to engage in it'.

The exercise of power through conflict creation or suppression has the potential to influence the process of adoption of management innovation in organisational settings.

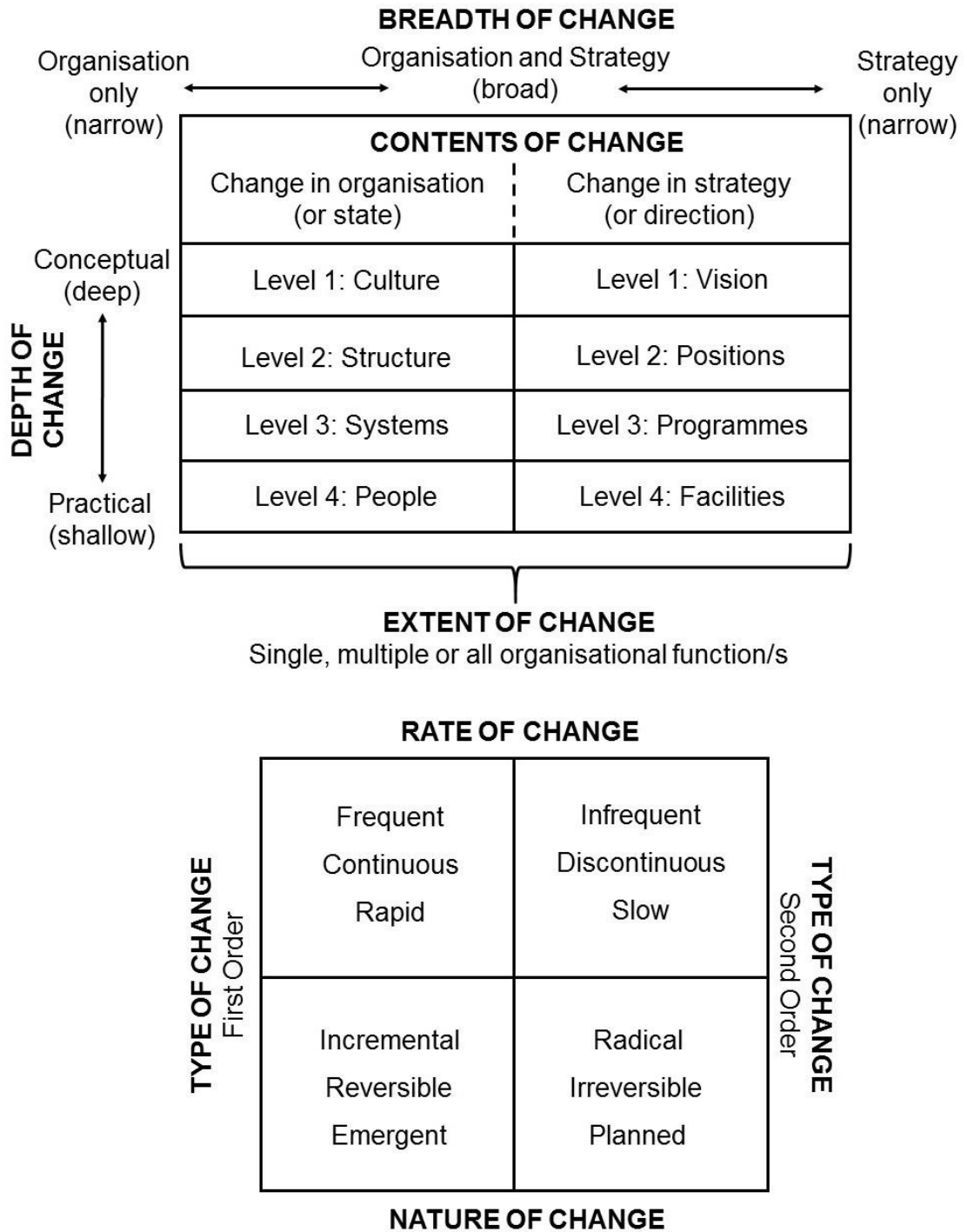
2.5.4 Ambition of change as influencing contextual factors

Apart from power relations and conflict in organisational settings, the process of adoption of innovation is inextricably linked with organisational change (Damanpour, 1991). This section of the literature evaluation explores the ambition of innovation and change in organisational settings.

The ambition (or aim) of innovation is to introduce various changes in order to maintain, or advance, a competitive advantage in organisational settings (OECD & Eurostat, 2005 p. 36). The ambition for innovation and organisational change can be described using attributes of change (for example, contents, depth, breadth, extent, type, nature, and rate). These attributes are frequently used to describe innovation too. Figure 2–4 on page 73 shows the:

- *contents of change*, which includes changes in organisation (or state) and/or strategy (or direction). Within these contents of change there are different levels of change (Mintzberg & Westley, 1991);
- *depth of change*, which ranges from the more conceptual levels such as vision and culture, to the more practical levels such as facilities and people;
- *breadth of change*, which can be broad (in both the organisation and strategy contents) or narrow (in either the organisation or strategy contents);
- *extent of change*, which refers to whether change occurs in one function, multiples functions, or in all organisational functions;
- *type of change*, which can be 'first order' or 'second order':
 - First order change includes a frequent, continuous or rapid *rate of change*, and an incremental, cumulative, emergent *nature of change*;
 - Second order change includes an infrequent, discontinuous or slow *rate of change*, and a radical, extensive and planned *nature of change* (Watzlawick, Weakland & Fisch, 1974 pp 10-11).

Figure 2–4: The ambition and attributes of organisational change



Sources: adapted from Anderson & Anderson, 2010; Birkinshaw, Hamel & Mol (2005); Poole & Van de Ven, 2004; Mintzberg & Westley (1992); Watzlawick, Weakland & Fisch, 1974; Weick & Quinn, 1999.

When introducing transformational change, Mintzberg and Westley (1992) suggest changes in organisation have to be accompanied by changes in strategy at more conceptual levels (culture and vision) but not necessarily at more practical levels (people and facilities). For example, they state that 'to try and change the culture without changing vision (or vice versa) would seem to make little sense, but there can be change at the level of people without changing facilities (and vice versa)' (Mintzberg & Westley, 1992 p. 40). They also propose that changes in either organisation or strategy at a more conceptual level have to be accompanied by changes at a more practical level. Changes introduced at lower practical levels, however, need not be accompanied by changes at more conceptual levels. This means that the 'change process can logically be cut off on their way up the scale but not down' (Mintzberg & Westley, 1992 p. 40). Thus, changes introduced at organisational levels have to support changes at a management innovation levels, and vice versa.

It can therefore be seen that alongside the organisational setting for innovation, networks involved in the innovation process, and power and conflict in the innovation process, the ambition of innovation and change is also an important contextual factor to take into consideration when describing and exploring the process of adoption of a management innovation.

2.6 The study of Knowledge Management as a management innovation

The management innovation under scrutiny in this thesis is Knowledge Management. A review of the Knowledge Management literature has not found any empirical studies of the process of adoption of Knowledge Management from a management innovation or innovation process perspective, although Knowledge Management's role in the innovation processes is widely discussed (for example, Auernhammer & Hall, 2014; Newell et al, 2009). Research to date has typically focused on the implementation phase of the adoption of Knowledge Management in organisational settings (Lin, 2007). While researchers have used innovation-inspired language in their studies (for example, Lin, 2011; 2014 and Xu & Quaddus, 2012), they have not studied the process of adoption of Knowledge Management in organisational settings from an innovation process perspective.

Other research has focused on the evolution (or maturity) of Knowledge Management through different: stages (for example, Koenig, 2002; Hsieh, Lin & Lin, 2009); ages (for example, Snowden, 2002); phases (for example, Wei, Lee & Hsu, 2003); or generations (for example, Firestone & McElroy, 2003; Rezgui, Hopfe & Vorakulpipat, 2010; Vorakulpipat & Rezgui, 2008). These authors explain the evolution of Knowledge Management in terms of: knowledge processes (for example, creating, distributing, converting, sharing etc.); approaches (for example, codification and personalization); rationale (for example, processing existing knowledge for supply or generating new knowledge to meet demand); views (for example, functionalist, constructivist, integrated views of knowledge); theories or perspectives (for example, organisational learning or complexity theory); progress (for example, from chaotic and conscientious to advanced and integrated); and outcomes (for example, knowledge sharing, knowledge creation, or value creation). Whilst these authors highlight how organisations progress with Knowledge Management, they do not help practitioners navigate the process of adoption of Knowledge Management in organisational settings.

Few Knowledge Management studies have been conducted in the public sector. Those journal articles that do have such a focus include diverse topics such as:

- General issues related to (Cong & Pandya, 2003), and general perceptions of (McAdam & Reid, 2000), Knowledge Management in the public sector;
- Developing a public sector framework for Knowledge Management (Abdullah & Hema, 2009);
- Knowledge Management performance in Singapore (Luen & Al-Hawamdeh, 2001), United States (Brown & Budley, 2003) and Iran (Monavvarian & Kasaei, 2007);
- Factors influencing knowledge sharing in the UK (Taylor & Wright, 2004) and knowledge transfer in Malaysia (Syed-Ikhsan & Rowland, 2004);
- Knowledge Management implementation in an accounting organisation in Malaysia (Chong, Salleh, Ahmad & Sharifuddin, 2011);
- Exploring how Knowledge Management practice differs in public sector organisations in India (Chawla & Joshi, 2010); and
- Knowledge Management implementation in a UK healthcare context (Newell, Edelman, Scarborough, Swan & Bresnan, 2003).

These journal articles demonstrate a growing interest in Knowledge Management in the public sector. However, they do not focus on the process of adoption of Knowledge Management from a management innovation perspective.

Existing practical advice for public sector practitioners implementing Knowledge Management is codified in the British Standards Institute (BSI) report of 2005. This pays much attention to the question of task forces recruited to implement a management innovation. A task force is defined as 'a multi-disciplinary, versatile group [of practitioners] that essentially acts as an internal consultancy unit specializing in knowledge issues' (BSI, 2005 p. 2). The BSI (2005) research has found that these centralised task forces are typically small teams of less than fifteen people. They offer either Knowledge Management 'service' to other staff members (BSI, 2005 p. 37) or 'co-ordinate' activities of other staff members (BSI, 2005 p. 46). These task forces take different approaches:

- A *service approach* is when the task force initiates activities in conjunction with staff members, then helps develop and pilot them before transferring ownership to staff members for delivery and maintenance (BSI, 2005 p. 37);
- A *co-ordination approach* is when the task force helps coordinate or facilitate the delivery of Knowledge Management activities, including those chosen and owned by staff located in different functions or locations (BSI, 2005 p. 46).

This BSI (2005 pp 2 & 65) report offers a list of: (1) common characteristics of task forces; and (2) guidelines to maximise their impact. The findings and recommendations of this report include:

- *Drivers and strategic relevance*: task force 'activities are driven by issues which in many cases are closely connected to overall [public sector] organisational objectives and strategies'. It is recommended task forces 'associate themselves with a concrete purpose that is directly or indirectly linked to stated strategic goals of public sector organisations';
- *Interventions and competence*: task force 'interventions can focus on people issues or tools, depending on the issue addressed. In most cases, however, these teams will prioritize people issues, and deploy tools as a means to an end'. Task force 'members usually have an information technology related background'. There is, however, 'a trend towards a more multi-disciplinary environment emphasizing, in particular, consultation and facilitation skills';
- *Innovation agent and mandate*: task force members should be 'operating as innovation agents that bring new solutions into an organisation, pilot and test them on a small scale basis and finally roll them out in the broader organisation'. As such, a task force 'continuously re-creates its own mandate by demonstrating their value to senior management and the rest of the organisation';
- *Customer focus and service provision*: task forces should 'enlist other functions and groups into their activities by identifying issues and possible solutions that are of actual relevance to them'. They should be 'implementing projects in close collaboration with process owners in other

functions, with the latter always retaining the ultimate responsibility for and ownership of Knowledge Management projects’.

Despite this research, there is a lack of knowledge about the adoption of such task forces in public sector organisational settings. For example, a case study in Newell et al’s (2009 pp 46-53) book on *Managing knowledge work and innovation* draws attention to factors such as: organisational structure; recruitment and selection; training and development; as well as measuring performance.

2.7 Summary and conclusion

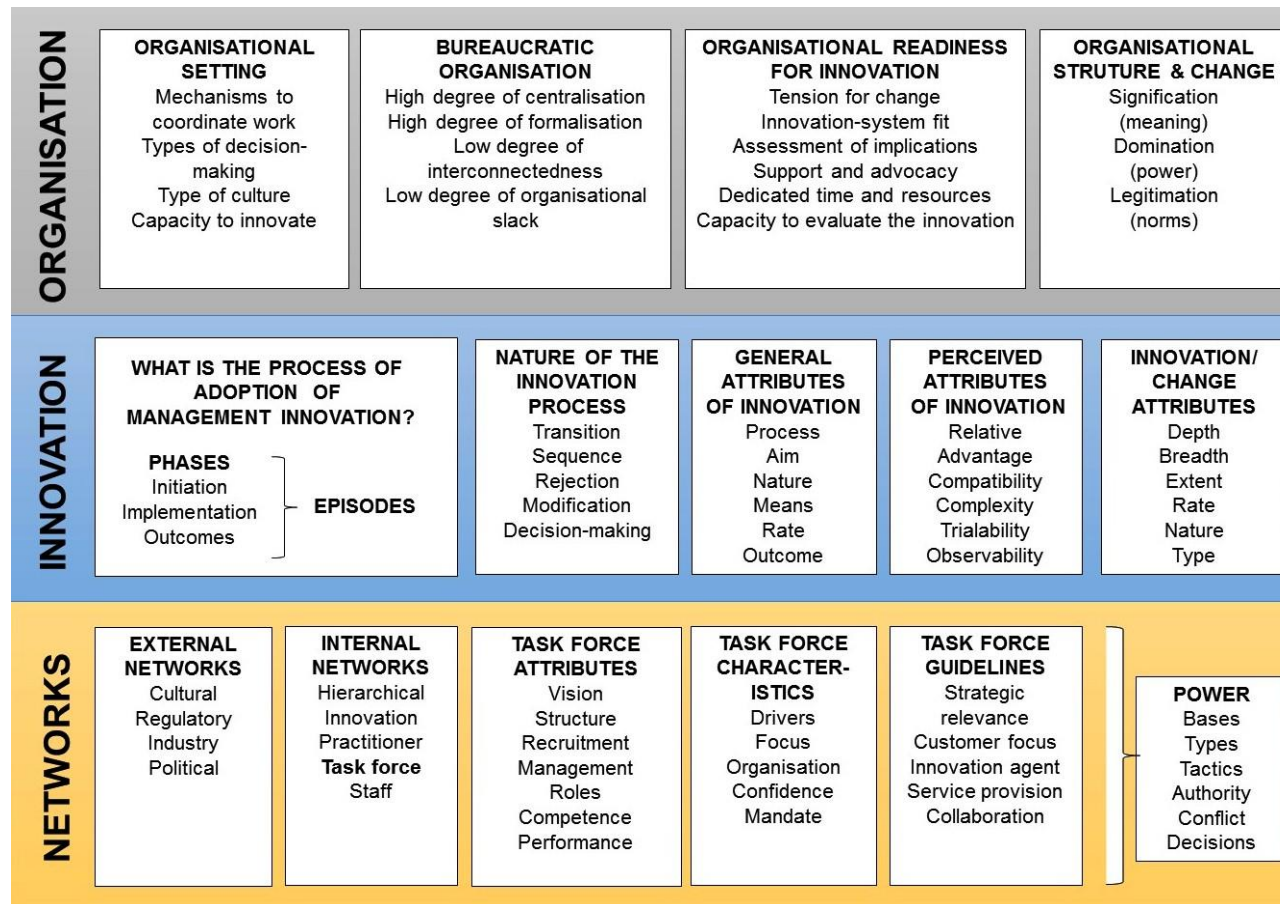
The review of the literature reveals that although Knowledge Management has not previously been articulated as a management innovation, it may be conceived as such. This is because it shares the main characteristics of a management innovation. Since Knowledge Management has not been treated as a management innovation before, it has not been modelled as one. This is unsurprising given that even innovation researchers have not paid much attention to the modelling of management innovation. Indeed, only two models exist of the process of *generation* of a management innovation: Birkinshaw & Mol, 2006; and Birkinshaw et al, 2008.

A contribution of this chapter is a proposed model of the process of *adoption* of a management innovation (see Figure 2–3 on page 52) created from an analysis of the two extant models of management innovation and three other general, well-cited, innovation models (Rogers, 2003: innovation development; innovation-decision; and innovation in organisations). This combined model explains that management innovation is a process that comprises three phases (initiation; implementation; and outcomes), and each phase is made up of episodes. Decision-making takes place at various points across the whole process.

It is recognised that the adoption of management innovation takes place within an organisational context and thus factors such as: the organisational setting for innovation; networks involved in the innovation process; power and conflict in the innovation process; and the ambition of innovation and change are important to a management innovation's initiation, implementation and outcomes.

The findings of the literature evaluation (as summarised in Figure 2–5 below) contributed to the formulation of research questions shown in Table 1-1 in Chapter 1. The main research question addresses: *what is the process of adoption of management innovation in an organisational setting?* To answer this question ancillary questions relating to: the *attributes* of management innovation (RQs 1-3); and *phases and episodes* across the whole process of adoption (RQs 4-7) were identified. The identification of a third, and final, set of two questions (RQs 8-9) helps explore the *practical value* of the research output. How the research design was established and implemented to address these research questions follows in Chapter 3.

Figure 2–5: A summary of findings from the evaluation of literature



Source: original

3 CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The previous literature evaluation chapter provides a contextual background for the research discussed in this thesis. This chapter explains how the research was conceived, designed and conducted. It also includes contextual information about the public sector agency (PuSA) in which this research was conducted. The content responds to increased calls for sincerity in research, which refers to increased transparency about methods used and challenges faced (Tracy, 2010). Throughout this chapter a distinction is made between material and data, as 'material only becomes data' through careful selection (Wetherell, Taylor & Yates, 2002 p. 24).

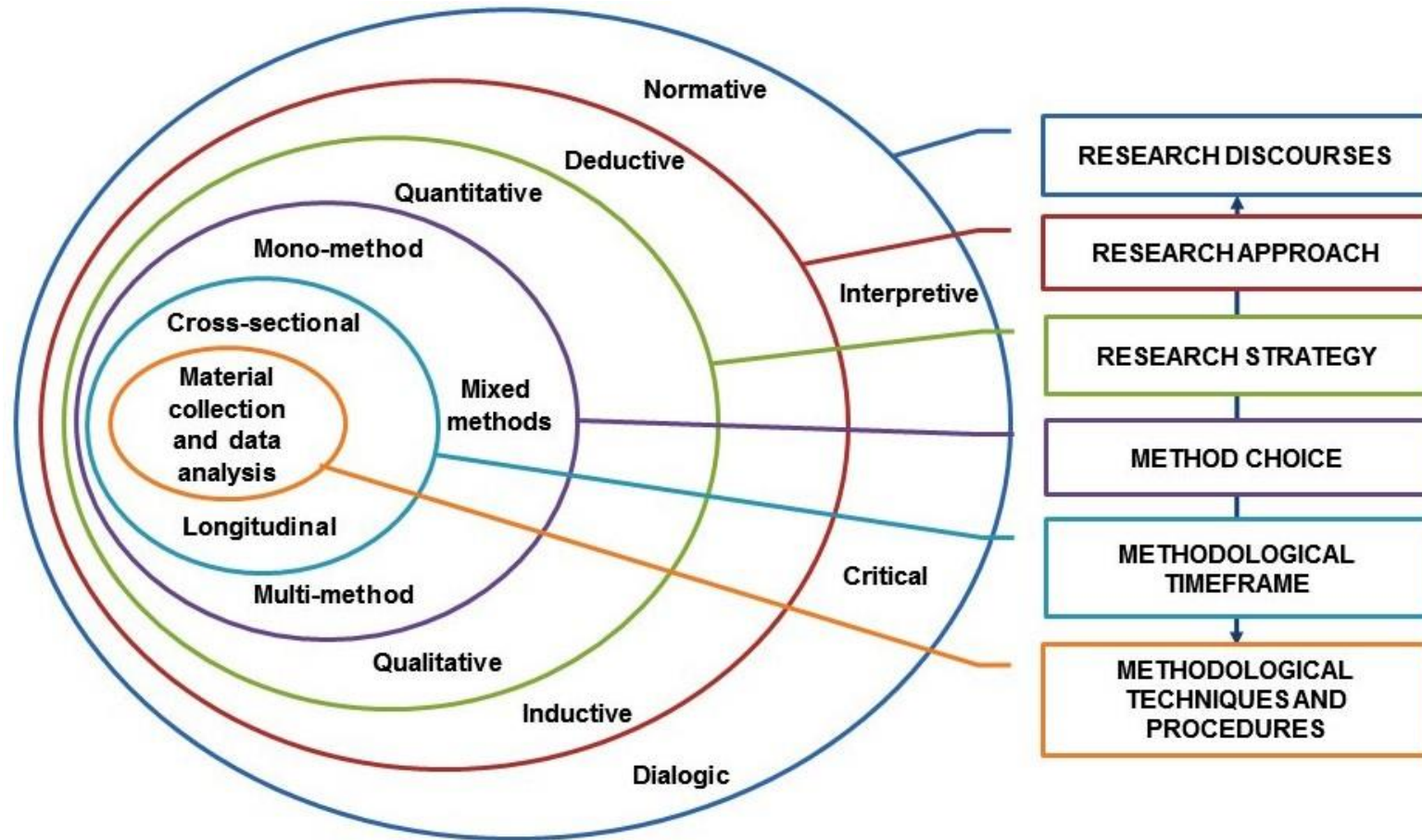
The main body of this chapter is divided into five sections:

- The first section presents the pragmatic research design choices made in this research. The value of the chosen approach is discussed here;
- The next section presents contextual factors that influence methods choice. To situate these factors: (1) the background details of the case study organisation is given; and (2) the initial approval process for the approval of the research reported in this thesis is discussed;
- This is followed by a discussion of the site for field work, the choice of case study strategy, and case study design decisions;
- Thereafter, the fieldwork is discussed against four research stages that appear in a case study protocol: (1) research design and literature evaluation; (2) material collection and data management; (3) analysis and discussion and (4) conclusions;
- The final section discusses the evaluation of qualitative research (in general) and proposes criteria to evaluate the research presented in this thesis.

3.2 Research design choices, stance and output

The different choices in designing research can be represented in the form of a 'research onion' that consists of inter-related layers (Saunders, Lewis & Thornhill, 2009). The research orientation (the outer layer) guides the selection of research approach, methods, and timeframe (the middle layers) including techniques of gathering material and procedures for analysing data (the core layer) (Saunders & Tosey, 2013 p. 58). Figure 3–1 shows the layers in the research onion.

Figure 3–1: Research onion design choices



Source: adapted from Saunders, Lewis and Thornhill, 2009 p. 108

There are four main discourses in organisational research: normative; interpretive; critical; and dialogic (Deetz, 1996). The different research beliefs underlying these discourses (Orlikowski & Baroudi, 1991) and the different ways researchers engage in research (Buchanan & Bryman, 2007 p. 485) are summarised in Table 3–1.

Researchers are usually encouraged to position their research within one of these four main discourses (Buchanan & Bryman, 2007). However, Deetz (1996 p. 199) states that researchers seldom adhere to a single discourse, but practice 'co-optation' of attributes from different discourses 'that best suit their immediate purposes'. It is therefore possible to adopt a pragmatic stance that adopts different research orientations, methods etc. to best answer the research questions (Deetz, 1996; Morgan, 2007; Wahyuni, 2012).

This study took a pragmatic view that drew on traditions of dialogic and critical discourse. It is not uncommon to combine these discourse traditions as dialogic research is often subsumed under a critical label (Deetz, 1996). In this study a pragmatic research design for generating valid empirical knowledge included: an inductive research approach; a case study strategy; qualitative multi-methods and a longitudinal timeframe to gather material and analyse data. The value of this pragmatic stance was four-fold. Firstly, it allowed for the longitudinal study of the process of adoption of management innovation in an organisational setting. It also allowed for the study of contextual factors that influence the process of adoption of management innovation. This approach addresses conflict, an inherent part of social systems in which management innovations are adopted. Finally, it facilitated for both description and exploration of the management innovation, and how it changed over the period of its adoption.

Table 3–1: Four main research discourses

	NORMATIVE	INTERPRETIVE	CRITICAL	DIALOGIC
Basic research goal	The basic goal is to discover law-like relations among variables that form the foundation for prediction and control of phenomena.	The basic goal is to display a unified culture by giving an interpretation of how participants perceive, understand, and act towards various phenomena.	The basic goal is to unmask domination to transform the status quo and allow participants to emancipate themselves from ongoing oppression.	The basic goal is to reclaim conflict to allow multiple ‘unknown’ voices to emerge in order to foster more open discourse among people.
Organisational benefits	Research addresses problems of inefficiency and disorder to achieve organisational benefits of control and expertise.	Research addresses problems of meaninglessness and illegitimacy to achieve organisational benefits or commitment and quality work life.	Research addresses problems of domination, alienation, and consent to achieve organisational benefits of participation and expanded knowledge.	Research addresses problems of marginalisation and conflict suppression to achieve organisational benefits of diversity and creativity.

<p>Ontology: the nature of reality</p>	<p>A physical and social world exists independent of people. Reality is apprehendable, identifiable, and measurable.</p>	<p>The physical and social world is not 'given' and can only be interpreted from the participants' perspective. Multiple local realities are constructed in the mind of the individual, and reproduced and reinforced through people's actions.</p>	<p>The physical and social world consists of a dialectical relationship between various elements and totality that is historically constituted, and shaped by contextual influences. Reality exists in a particular historical moment, and can change over time.</p>	<p>The physical and social world is given meaning through discourse. Discourse is a representational picture of social relations, and is constructive and constitutive of social reality. There are multiple versions of reality.</p>
<p>Human rationality: intentionality of human action</p>	<p>People's actions are intentional and fully or boundedly rational.</p>	<p>People can act intentionally and rationally to change their circumstances. People create their own subjective meanings as they interact with the world around them. These meanings are constitutive of people's behaviours.</p>	<p>People can act intentionally and rationally to change their social and material circumstances. However, contextual influences and power relations either constrain or enable their capacity to act.</p>	<p>People can act intentionally and rationally to change their material and social circumstances. However, discourse, power and knowledge constrains or enables their capacity to act.</p>

<p>Research orientation and social relations</p>	<p>Research adopts a consensus orientation that focuses on similarity and accord in social relations. Social relations are relatively stable, orderly, and attributed to the functional needs of the social system.</p>	<p>Research adopts a consensus orientation that focuses on similarity and accord in social relations. Social relations are relatively stable, orderly, and attributed to participants' shared norms and interests.</p>	<p>Research adopts a dissensus orientation that focuses on differences and disruption in social relations. Social relations are dynamic, conflictive and fragmented. Research focuses on how conflict is created and sustained.</p>	<p>Research adopts a dissensus orientation that focuses on differences and disruption in social relations. Social relations are dynamic, conflictive and fragmented. Research focuses on how conflict is suppressed and marginalised.</p>
<p>Epistemology: how knowledge is constructed</p>	<p>Knowledge can be separated from people by applying existing elite/apriori theoretical concepts to research phenomena.</p>	<p>Knowledge is socially constructed by developing and negotiating local/emergent theoretical concepts with research participants.</p>	<p>Knowledge is grounded in social and historical practices, and constructed by applying existing elite/apriori theoretical concepts to research phenomena.</p>	<p>Knowledge is grounded in polyvocal voices, and constructed by developing and/or negotiating local/emergent theoretical concepts as the research progresses.</p>
<p>How knowledge is evaluated</p>	<p>There are universal criteria for evaluating knowledge: validity, rigor, and replicability or</p>	<p>There are no universal criteria to evaluate knowledge. However, some authors have</p>	<p>There are no universal criteria to evaluate knowledge. Suggested criteria for evaluation</p>	<p>There are no universal criteria to evaluate knowledge. Suggested criteria for evaluation</p>

	<p>generalizability from the sample to a stated population (for example, Yin, 2003).</p>	<p>proposed various criteria (for example, Klein & Myers, 1999; Lincoln & Guba, 1985).</p>	<p>includes the extent to which the enquiry erodes ignorance and misapprehensions, and provides a stimulus to transform the existing structure (for example, Alvesson & Deetz, 2002).</p>	<p>includes the extent to which research unpacks taken-for-granted realities to uncover their complexities, lack of shared meaning, and hidden resistances (for example, Deetz, 1996; Alvesson & Deetz, 2002).</p>
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<p>Axiology (researcher position and values)</p>	<p>The researcher plays a passive, neutral role in an investigation, and does not intervene in the phenomenon of interest. The researcher can study phenomena without bias by following rigorous, standard procedures. The researcher does not get involved in moral judgments or subjective opinion, so the outcomes are value-free.</p>	<p>The researcher is always implicated in the phenomena being studied. Researchers' prior assumptions, beliefs, values, and interests intervene to shape their investigations. The researcher can never assume a value-neutral stance as the findings are jointly created with research participants.</p>	<p>The researcher is implicated in the phenomena being studied. Researchers' prior assumptions, beliefs, values, and interests intervene to shape their investigations. The researcher can never assume a value-neutral stance as they hope and expect their value biases to influence the research process and outcome.</p>	<p>The researcher is implicated in the phenomena being studied. Researchers' prior assumptions, beliefs, values, and interests intervene to shape their investigations. The researcher can never assume a value-neutral stance and is aware that their value biases may influence the research process and outcome.</p>
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Sources: adapted from Alvesson & Deetz, 2002; Buchanan & Bryman, 2007 p. 85; Deetz, 1996; Morgan, 2007; Wahyuni, 2012; and Orlikowski & Baroudi, 1991.

3.3 Contextual factors that influenced research design

A number of contextual factors influenced the choice of methods deployed in the study. Buchanan and Bryman (2007) assert that methodological choice involves a number of unavoidable characteristics that occur when researching in organisational settings. For this study, these characteristics are discussed with reference to: the researcher as employee in the organisation; negotiating access and method; a concern with research ethics; intended audience in preparing this thesis; and background to the research setting. To situate these factors the background details of the case study organisation is given below. This is followed by a report of the initial approval for the research discussed in this thesis.

3.3.1 A contextual background to the research

The purpose of this section is to provide a contextual background to PuSA, the public sector agency in which the research in this thesis was conducted. It provides necessary background information for a full understanding of analysis presented in Chapters 4, 5 and 6. PuSA operates in a political environment under intense media scrutiny. Information has been changed where necessary to preserve the anonymity of the organisation and participants.

The section covers:

- The establishment of the organisation and its operation to 2008;
- The three organisational change programmes between 1999 and 2008;
- Knowledge Management and its characterisations in the organisation.

The material used to construct this history was derived from publicly available sources, as well as internal documents and emails. Table 3–2 shows a timeline of dates, events, and changes that influenced PuSA’s external and internal context. The events and texts referred to here (with #) are cross-referenced to the line numbers in the chronological timeline in Appendix A.

Table 3–2: PuSA’s external and internal context

Date	Events	External contextual influences			Internal contextual influences			
		Economic discourses	Political stakeholders	Political directives	PuSA HQ CEOs	PuSA operating model	PuSA remit	PuSA change programme
1969	The knowledge economy discourse starts circulating (originator Peter Drucker)	✓						
1979	A UK Conservative Government is elected		✓					
1985	The Scottish Office is formed (a department of the UK Government)		✓					
1990	A UK Act of Parliament establishes a public sector agency (PuSA)			✓				
1991	PuSA HQ CEO 1 takes up post				✓			
1991	PuSA headquarters and agencies begin operations					✓		
1991	PuSA’s remit includes all facets of economic development						✓	

1996	An e-business discourse starts circulating (originator IBM management consultants)	✓						
1997	A UK Labour Government is elected		✓					
1997	A political directive is issued to hold a referendum on devolution in Scotland			✓				
1998	A political directive is issued for PuSA to lead in building the knowledge economy			✓				
1999	The Scottish Office becomes the Scotland Office		✓					
1999	A Scottish Parliament and Scottish Executive is formed		✓					
1999	A political directive is issued for PuSA to implement UK Modernising Government			✓				
1999	PuSA HQ CEO 1 initiates organisational change programme 1							✓
2000	PuSA HQ CEO 2 takes up post				✓			
2000	PuSA HQ CEO 2 initiates organisational change programme 2							✓
2000	A political directive is issued for PuSA agencies to change to subsidiaries		✓					
2001	PuSA's agencies structure changes to subsidiaries							
2002	A metropolitan area discourse is circulated	✓						
2004	PuSA HQ CEO 3 takes up post				✓			
2004	PuSA HQ CEO 3 initiates organisational change programme 3							✓
2007	The Scottish Executive becomes the Scottish Government		✓					
2008	A political directive is issued for PuSA subsidiaries to change to local offices			✓				
2008	A political directive is issued for PuSA to change its remit			✓				
2008	PuSA's subsidiaries change to local offices					✓		

2008	PuSA's remit focuses exclusively on business development and growth						✓	
2008	PuSA HQ CEO 3 introduces two regional advisory groups					✓		

Source: various internal and external documents

3.3.1.1 The establishment of PuSA and its operations to 2008

The public sector agency (PuSA) was established in 1990 (#4), and began its operations in 1991 (#6). When PuSA was first established, it consisted of a headquarters and distributed agencies:

- Headquarters is a non-departmental public body established by statute under a UK Act of Parliament to deliver economic development functions on behalf of the Government;
- PuSA's twelve distributed agencies were originally private companies limited by guarantee established under the Companies Act 1985. These agencies were contracted by headquarters to deliver economic development functions in local geographical areas.

PuSA's headquarters are in Newton³, with its twelve distributed agencies located in southern, central and eastern (lowland) Scotland. In terms of size, PuSA is classified as a medium organisation, with staff numbers ranging between 1500 and 2500 over the period in question.

The initial remit of PuSA was broad. It included:

- supporting individuals' employment opportunities by providing careers guidance, training programmes and industry placements, as well as creating employment opportunities through business growth;
- providing information and funding to support business start-up and growth, and to attract overseas business investment to Scotland;
- investing in the necessary infrastructures, such as broadband and transport, to underpin business, sector and industry growth within Scotland (#7).

This remit was reduced in 2008 to focus exclusively on:

- supporting the development of high growth companies and industry sectors;
- attracting overseas business investment to Scotland (#434).

³ Newton is a pseudonym used to preserve the anonymity of the organisation.

The agencies' status changed twice during the period in question. First, PuSA's agencies' status changed to wholly-owned subsidiaries of PuSA headquarters in 2000. This decision was taken to make the subsidiaries more accountable to Scottish politicians following devolution in Scotland (White and Yonwin, 2004 p. 4). Later, PuSA's structure for subsidiaries changed to local offices of headquarters. This decision was taken to reduce bureaucracy and streamline delivery (#434). PuSA operates (in 2015) as a single organisation with one headquarters and twelve distributed local offices.

3.3.1.2 The organisational change programmes between 1999 and 2008

Three organisational change programmes were introduced during the period 1999 to 2008: (1) Knowledge Web (labelled K-Web) (#21); (2) Business Transformation (#35); and (3) Business Improvement (#300). These programmes were each initiated and led by three headquarters Chief Executive Officers (HQ CEOs 1-3) in post at the time (#5, #33, and #220).

Programme 1: Knowledge Web (April 1999 – March 2000)

HQ CEO 1 initiated a £5 million 'Knowledge Web (K-Web)' programme in April 1999 (#21). This K-Web Programme 1 was introduced in response to changes in the environment, characterised by a 'knowledge economy' discourse:

The K-Web vision was to 'help PuSA become a leading economic development agency, and more open, accessible and accountable, through the use and communication of knowledge' (#34).

A presentation on 'what's emerging' during this initial review period highlights that working as 'one network', rather than disparate agencies, was considered important (#31). The K-Web programme not only had to incorporate PuSA's view that knowledge was central to its delivery of economic development services, but also the newly launched UK Labour Government's 1999 UK Modernising Government Programme (#20). All public sector organisations had to modernise and transform their services using electronic means by 2008

(#38). As a consequence, this K-Web Programme 1 was transformed into a wide-scale Business Transformation Programme 2 (#35).

Programme 2: Business Transformation (March 2000- June 2003)

HQ CEO 2 transformed the £5 million K-Web Programme 1 into an £87 million 'Business Transformation' Programme 2 in March 2000 (#35). The primary driver was the UK Modernising Government (1999) initiative, which promoted an e-business discourse:

The vision for Business Transformation was '... to reach more customers by improving access to services through e-business; to examine every area of the business to become more effective, efficient and customer-focused; to transform PuSA into the world's leading e-enabled economic development agency; and to have the ability, where possible and appropriate, to deliver all of our services via the web by 2003' (#42).

This programme of transformation included:

- corporate down-sizing from 2000 to 1500 staff;
- reducing the product range from 1500 to 100;
- reducing the number of brands from 270 to 20;
- creating 'shared services' for functions that were replicated across PuSA (for example, human resources and information technology);
- re-engineering all business processes to allow web delivery of products and services;
- changing the culture to enable PuSA to work as 'one network' (#35, #42).

Programme 3: Business Improvement (June 2004 - 2008)

HQ CEO 3 initiated a Business Improvement Programme 3 in June 2004 to further develop PuSA (#300). This included:

- reviewing PuSA's organisational structure, projects and programmes in accordance with a 'metropolitan region' discourse;
- improving external relationships 'to ensure stakeholders, customers and the wider public understood and supported PuSA objectives and delivery of them' (#300).

3.3.1.3 Knowledge Management as part of organisational change (1999-2008)

Knowledge Management is evident across all three of the change programmes introduced above, albeit characterised in different ways.

Knowledge Management in Programme 1: Knowledge Web (April 1999 – March 2000)

In K-Web Programme 1 'Knowledge Management' was a label used for the work of the Knowledge Management Directorate (#30). This work included commissioning economic development research, developing business strategies, planning financial budgets, formulating quantitative performance targets, and measuring and evaluating performance. An outcome of this programme was the implementation of a new bespoke 'Knowledge Management Information System' to automate and capture financial, planning and reporting information against the delivery of PuSA's economic development activities (#69). This was essentially information management work using the label 'Knowledge Management'.

Knowledge Management in Programme 2: Business Transformation (March 2000- June 2003)

In Business Transformation Programme 2 there was a desire to extend Knowledge Management in PuSA (#50). Three 'tools' (in PuSA's vocabulary) were selected for implementation in July 2001: (1) Communities of Practice (a Lave and Wenger, 1991 construct); (2) intranet (initially called a 'knowledge base' in PuSA); and (3) knowledge packs (based on an Ernst and Young management consultancy product called power packs) (#70). These were re-labelled 'Knowledge Working' to distinguish them from existing information management work labelled 'Knowledge Management' (#74). Moreover, another label was required for a new 'Knowledge Working' team, located within the Knowledge Management Directorate. During this period, a task force (a group of specialist practitioners) was recruited to facilitate the implementation of Knowledge Working in PuSA (#82, #92).

Knowledge Management in Programme 3: Business Improvement (June 2004-2008)

In Business Improvement Programme 3 Knowledge Working comprised the continued implementation and use of numerous Knowledge Working ‘tools’ shown in Table 3–3 below. These ‘tools’ can be found in the extant Knowledge Management literature. PuSA called these ‘tools’ when in fact they many not all be conceived as such. For example, Action Based Learning is a process of learning to improve practice (Pedler, 2011). Table 3–3 uses PuSA’s labels.

Table 3–3: Knowledge Working tools in PuSA (2002 – 2008)

Diagnostic Tools	Tacit Tools	Explicit Tools
Cynefin Modelling	Action Based Learning	Intranet
Business Needs Analysis	After Action Reviews	Extranet
Social Capital Analysis	Archetypes	Knowledge Packs
Social Network Analysis	Ashen Technique	Records Management
	Best Practice	Webtrends
	Community Development	
	Community Assessment	
	Knowledge Café	
	Knowledge Capture	
	Knowledge Market	
	Narrative Techniques	
	Stakeholder Planning	

Source: PuSA internal documents

The analysis specifically traces the process of adoption of Knowledge Working (conceptualised as a management innovation) in PuSA. It is through the study of Knowledge Working in Chapters 4, 5 and 6 and the literature evaluation in Chapter 2 that theoretical insight about the process of adoption of management innovation is gained. This theoretical insight gained from this study is discussed further in Chapter 7.

3.3.2 Initial approval for the research at PuSA and consideration for research ethics

Procedural ethics were followed by seeking approval and funding for this research. The researcher was employed by PuSA on and off throughout the periods of change described above (Knowledge Web; Business Transformation; and Business Improvement). The research reported in this thesis was conceived when the researcher took up a new role in June 2003. Her role as Knowledge Analyst in two subsidiaries provided a unique opportunity to study the process of adoption of a management innovation in an organisational setting. There was no need to negotiate special access to the case study organisation. As an employee, she had access to the research setting, and knew who to approach to sanction the research. This part-time research was sanctioned and part-funded by PuSA's Headquarters Human Resources Directorate, on approval of first one, and later another, subsidiary Chief Executive Officer.

Relational ethics were addressed by ensuring participants were aware of the study and by using pseudonyms throughout this thesis. The researcher announced her study on the adoption of Knowledge Working at a Knowledge Analyst meeting in August 2003. Verbal assurances were given that the research would preserve the anonymity of the organisation and research participants. An email was also sent to senior members of staff stating that research was being undertaken for a PhD thesis. In this email staff were asked whether they could provide any relevant material on Knowledge Working and Business Transformation Programme 2. This study was openly discussed throughout the researcher's period of employment in PuSA. This meant that numerous staff within PuSA, including Knowledge Analysts who joined at a later date, were aware of the topic of this research. The research proposal was also circulated to interested parties. Any staff with whom she had contact knew that she was conducting research for a PhD.

A concern for situational ethics limited method choice. The first subsidiary Chief Executive Officer, who sanctioned this research, expressed two legitimate concerns regarding method choice. The first concern was that subsidiary staff would perceive quantitative survey methods as an additional means of monitoring their uptake and usage of yet another headquarters business transformation initiative. It was unlikely that quantitative survey methods would receive a good response rate. The second concern was that subsidiary staff were already under a great deal of time pressure as a result of corporate downsizing. The use of either quantitative surveys or qualitative interviews would detract from the time staff had to do their jobs. A concern for situational ethics thus limited the gathering of material to: (1) what could easily be obtained in electronic format; and (2) what the researcher could obtain in her role as Knowledge Analyst as and when the job permitted.

Exiting ethics were not a concern as there was no expectation that this thesis be submitted to PuSA after the researcher left the organisation in March 2007. As such, the primary audience for this thesis is an academic one. This thesis does, however, have applicability to a practitioner audience. As discussed in section 1.5 on page 5 in Chapter 1 three interrelated models (a model of decision-making; a combined adoption-decision-model; and a task force adoption-decision model) can be used as tools for the project management of management innovations. Additionally, a summary of case study findings in Table 6–2 on page 249 is presented in Chapter 6. Practitioners can draw conclusions from this study and apply lessons learned to current or future adoptions of management innovation.

3.4 The site for field work and case study strategy

This study, which focuses on a single organisation as outlined above can be conceived as case study research. A case study is one of many strategies that can be chosen when conducting inductive research (Yin, 2003; Creswell, 2013). A case study is an 'empirical enquiry' (Yin, 2003 p. 13) that 'examines a contemporary phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities' (Benbasat, Goldstein & Mead, 1987 p. 370). Yin (2003) suggests case studies are an appropriate strategy when: (a) the nature of the questions seeks to describe, explore or explain social phenomena; (b) the degree of focus is on contemporary events even in historical contexts; and (c) there is little control over behavioural events. The case study is also an appropriate method when the boundaries cannot be set at the outset of the research (Benbasat et al, 1986). The characteristics presented above can be accounted for in this study, supporting the view that the case study method was a legitimate methodological choice.

There are different types of case study designs to choose from. This includes: (1) number of cases (single or multiple); and (2) unit of analysis (holistic or embedded) (Yin, 2003 p. 40). The research design selected in this case is a single-embedded-case study. The 'case' is the process of adoption of management innovation in an organisational setting. A chronological timeline of events and texts is the primary unit of analysis. An embedded unit of analysis is the task force recruited to implement management innovation in an organisational setting. This case was not selected randomly. The case was chosen because it concerned the adoption of a Knowledge Management initiative later conceptualised as a management innovation. This topic was identified in the evaluation of literature as an initial topic for further research. The sampling of this case can therefore be described as 'purposive' as 'it illustrates some feature or process [of interest]' (Silverman, 2000 p. 104).

The case study reported in this thesis is both descriptive and exploratory. A descriptive case 'is used to describe an intervention or phenomenon and the real-life context in which it occurred' (Baxter & Jack, 2008 p. 584). An exploratory case study 'is used to explore those situations in which the intervention being evaluated has no clear, single set of outcomes'. An exploratory case study is also used when little is known about a phenomenon (Yin, 2003). An evaluation of the literature highlighted that there is little known about the process of *adoption* of management innovation in organisational settings. In addition, there is little known about the adoption of Knowledge Management through a task force approach in public sector organisations where Knowledge Management might be conceived as a management innovation. The case study presented in this thesis thus describes and explores the process of adoption of a programme of management innovation labelled 'Knowledge Working' within a public sector agency (PuSA).

In case study research a multi-method or mixed-method is frequently selected to gather material and analyse data (Yin, 2003). A multi-method employs qualitative or quantitative procedures and techniques, whereas a mixed-method employs both qualitative and quantitative procedures and techniques (Saunders et al, 2009 p. 152). A qualitative multi-method was selected for this study due to concerns expressed about method choice (see section 3.3.2 above).

A longitudinal time horizon was selected to study the process of adoption of management innovation. This time horizon is in keeping with process research that investigates how a 'process unfolds over time' (Poole, Van De Ven, Dooley & Holmes, 2000 p. 12). The specific qualitative techniques to gather material and procedures to analyse the data will be explored further in the section that follows.

3.5 The field work

A qualitative case study protocol sets out the stages in the field work. This draws on a 'discourse tracing' method as explained by LeGreco and Tracy (2009 p. 1523). The case study protocol is shown in Table 3–4 with the timings of each activity for the research reported in this thesis.

Table 3–4: Research timeframe and case study protocol

Research Timeframe	Case study stages
Oct 2003 – Sep 2007	<p>Stage 1: Research design and literature evaluation</p> <ul style="list-style-type: none"> • Select a case using a change in practice • Define the case and identify an appropriate case study design • Evaluate the literature to outline potential research directions • Formulate research questions
	<p>Stage 2: Material collection and data management</p> <ul style="list-style-type: none"> • Gather extensive material from various sources • Simplify extensive material in some semblance of order • Select relevant material using processual principles • Display significant material in a chronological format • Transform displayed material into data for analysis
Feb 2009 – Nov 2010 and Apr 2011 – May 2013	<p>Stage 3: Analysis and Discussion</p> <ul style="list-style-type: none"> • Review the data for emergent themes or issues • Develop a framework to help analyse the data • Analyse the data using the framework as guide • Report on the analysis using a chronological format • Discuss the findings in relation to the research questions
To submission of this thesis	<p>Stage 4: Conclusions</p> <ul style="list-style-type: none"> • Reflect on the research undertaken in this thesis • Discuss contributions to knowledge and practice • Suggest recommendations for further research

Sources: adapted from LeGreco & Tracy (2009 p. 1523) and Miles & Huberman (1984) in Darke, Shanks & Broadbent (1998 p. 285).

3.5.1 Evaluation of the literature

The evaluation of literature took place from 2003 onwards. It was not limited to particular research stages but continued through the work of study.

Academic literature was primarily sought for evaluation that specifically promoted theory development and/or reported empirical investigation. A snowball method included conducting preliminary searches of *ISI Web of Science* and *CiteseerX* for highly cited papers to evaluate. *Google Scholar* was also used to search for additional sources of literature (for example, working papers, conference papers, and academic books) that did not appear in the preliminary search. Thereafter, journal papers were selected from online databases such as *ABI Inform*, *Emerald Insight*, *Sage Publications* and *Blackwell Synergy*. Citations in these initial literature sources highlighted further additional literature sources to evaluate. This snowball method resulted in the selection of over 500 papers, articles, books etc. for evaluation over the course of this study.

The combinations of terms used to search online journals and *Google Scholar* is shown in Table 3–5.

Table 3–5: Terms used to search for literature to evaluate

Innovation search terms	Process and episode search terms	Attribute search terms
Innovation	Process	Attributes
Management Innovation	Episodes	Networks
Knowledge Management	Phases	Task force
	Stages	Discourse
	Adoption	Power
	Generation	
	Initiation	
	Implementation	
	Routinisation	

Source: original

A pragmatic approach was taken to the evaluation of literature. Only literature of direct relevance to this study was chosen for inclusion in Chapter 2. This chapter, therefore, does not present an exhaustive evaluation of management innovation, innovation, knowledge management or business literatures. Rather, it contains literature from sources that are of direct relevance to the study of the process of adoption of management innovation (and Knowledge Management as a management innovation).

The following sources were key to the literature evaluation (as provided in Chapter 2):

- *Rogers (2003) book Diffusion of innovations, now in its fifth edition.* Rogers' theory on the diffusion (or spreading) of innovations is widely cited in various literatures. This comprehensive book discusses all aspects of innovation including its history, criticisms, processes, attributes, adopter categories and change agents;
- *Papers written by Birkinshaw, Hamel and Mol on management innovation.* From 2005 these academic authors have drawn attention to the importance of management innovation as a source of competitive advantage. Two papers on the process of generation of management innovation were particularly relevant. These were published in the *MIT Sloan Management Review* in 2006, and *Academy of Management Review* in 2008;
- *The British Standards Institute (BSI 2005) report Knowledge Management in the public sector: a guide to good practice.* This report was commissioned by the British Standards Institute (BSI) in 2005 to provide practitioners in the public sector with a guide to good practice in Knowledge Management. The research was undertaken by academics Perkmann and Scarbrough, and industry professionals Kannerkeril and McCrea. The publication of this report was overseen by a committee consisting of members from academic institutions and private companies.

A bibliographic reference manager, Mendeley Desktop, was used to store electronic copies of journals and references of all literature sources. The advantages offered by this software included organizing, searching, annotating, and highlighting content. This software automatically backed up the desktop database, which could then be viewed online via a web browser.

3.5.2 Empirical material collection and data management

This phase of empirical material collection and data management is characterised by two primary activities: (1) collecting material from various sources; and (2) reducing the material into data for analysis. These will be described below. First, it is necessary to discuss the different roles researchers can assume in their quest to obtain multiple sources of material.

3.5.2.1 The role of the researcher in collecting material

Researchers can assume contemporary or historical roles to obtain multiple sources of qualitative material (Creswell, 1998; Cassell & Symon, 2006). The six types of roles that researchers can adopt are shown in Table 3–6. The ticks in this table show the type and level of participation or observation that typically occurs in each of these roles. In contemporary roles the type of participation and observation can either be covert (when research has *not* been sanctioned) or overt (when research has been sanctioned). In historical roles, the type of participation and observation is not applicable. This is because historical research: (1) has yet to be conceived and sanctioned; and (2) does not involve human subjects. In both contemporary and historical roles the level of participation and observation can be full, partial, or none. In historical observer roles researchers may have had prior contact with, or experience, in an organisational setting. They can therefore draw on their prior knowledge of, and any material from, the research setting. In historical archival roles researchers gather purely archival material to reduce into data for analysis.

Table 3–6: Researcher roles in gathering qualitative material

Types of roles	Roles in gathering qualitative material	Type of participation		Type of observation		Level of participation			Level of observation		
		Covert	Overt	Covert	Overt	Ful	Partial	None	Ful	Partial	None
Contemporary	Complete-participant	✓		✓		✓			✓		
	Participant-observer		✓		✓	✓	✓		✓	✓	
	Observant-participant		✓	✓	✓		✓	✓		✓	✓
	Complete-observer		✓		✓			✓	✓		
Historical	Historical-observer	Not applicable		Not applicable		✓	✓		✓	✓	
	Historical-archival	Not applicable		Not applicable				✓			✓

Sources: adapted from Creswell (1998); Cassell & Symon (2006); Czarniawska (2004); Yin (2003); and Saunders, Lewis & Thornhill (2009).

To define the researcher roles adopted in this study, it is necessary to differentiate between: (1) dates of employment in PuSA; and (2) periods prior to, and after, commencement of this study. Table 3–7 shows that the researcher was employed in PuSA when organisational change was introduced, but left the organisation when various Business Transformation initiatives were being piloted. She later returned as a Knowledge Analyst, a member of a task force recruited to implement Knowledge Working in PuSA.

The roles adopted in this study are marked with A, B, C and D in Table 3–7:

- *Historical-archive role*: the researcher was not employed in PuSA, so any material gathered is purely from archival sources;
- *Historical-observer role*: the researcher was employed in PuSA prior to the sanctioning of this research, so has drawn on personal experience of organisational change in the analysis presented in Chapters 4, 5 and 6;
- *Participant-observer role*: the researcher was employed in PuSA but could only gather material through direct observation as and when her role permitted this;
- *Observant-participant role*: the researcher was employed in PuSA and gathered material through indirect observation of electronic sources (for example, emails and discussion groups).

It can therefore be seen that various researcher roles were adopted in this study.

Table 3–7: Case timeline, employment, and material gathered

Case Timeline	Employed in PuSA	Knowledge Analyst Role	Type of material
Circa-1995 to March 1999	No (A)	No (A)	Historical archive material (A & B)
April 1999 to March 2002	Yes (B)		
April 2002 to May 2003	No (B)		
June 2003 to March 2007	Yes (C & D)	Yes (C & D)	Situated employment material (C & D)

Source: original

3.5.3 The collection of empirical material

A decision was taken to start gathering qualitative material immediately after this research was sanctioned. The reason for this was the threat of redundancy. A potential job loss meant that collecting material would become problematic. As a consequence, empirical material was collected before the literature evaluation was complete. This could easily have resulted in 'a massive deluge' of irrelevant material (Burns, 2000 p. 475). However, the scope of the research was already broadly determined. From the outset the research comprised a longitudinal study of the adoption of Knowledge Working from its conception to potential conclusion. The focus was on Knowledge Analysts, members of a task force, recruited to facilitate the adoption of Knowledge Working. With this in mind, 'a body of material' was gathered that was guided by 'the broad topic of research' (Wetherell et al, 2002 p. 24). It was therefore believed that the risk of collecting irrelevant material was low.

There was initially a natural beginning and a natural end for gathering material. A natural beginning was the introduction of a PuSA future-state operating model in May 2002. However, as the collection of material ensued, a historical trajectory of Knowledge Working emerged from documents found on an archived Business Transformation Compact Disc (CD) that went back to 1995. Thereafter, a conversation with a member of staff drew attention to a presentation that highlighted the emergence of the 'knowledge economy' discourse in PuSA. The boundary therefore extended to include the origins of this internal knowledge economy discourse. Initially, it was envisaged that the end point would be determined by the chosen study time horizon or the management innovation's demise. Later, the natural end for collecting material was the disbanding of the Knowledge Working Community of Practice in December 2006. This represented the discontinuation of 'Knowledge Working' in its current form. However, this boundary also extended to include a final Knowledge Analyst review of Knowledge Working conducted in March 2007 prior to the researcher leaving PuSA's employment.

The type of qualitative material gathered during the course of this study is both 'historical' and 'situated' (see Table 3–7 on page 112):

- *Historical archive material* refers to documentary evidence gathered prior to employment as a Knowledge Analyst (circa-1995 to May 2003);
- *Situated employment material* refers to documentary evidence gathered during employment as a Knowledge Analyst in PuSA (June 2003 to March 2007).

It was important that the material gathered was relevant, as it was from this material that data had to be selected. Pettigrew's (1998) principles for conducting longitudinal field research was employed in gathering, and later selecting, material for reduction into data. The material had to be: processual (considering structure and action over time); comparative (including multiple levels of analysis); plurist (offering competing versions of reality); historical (capturing the evolution of ideas and actions over time); and contextual (examining reciprocity of organisational context and management innovation process over time) (Pettigrew, 1998 p. 277).

The sources, format and origins of both external and internal material can be seen in Table 3–8. The following material was gathered:

- Documentary and HTML material from the internet, PuSA’s intranet, a PuSA CD, and PuSA shared computer drives. In total, 8,732 documents and HTML pages were gathered;
- Email material from a personal work email account and discussion groups. Emails were saved as threads (emails relating to the same conversation or topic). This practice was consistent with PuSA’s records management programme. In total, 4,567 email threads were gathered;
- Field notes from participant observation. The collection of field notes was limited to those infrequent occasions when the researcher was able to directly observe events and converse with Knowledge Working colleagues on a face-to-face basis (primarily meetings and training events). Field notes were thus captured, when possible, to provide additional material to supplement electronic documentary material. In total, 52 field notes were gathered.

Method choice was thus limited to gathering material from electronic sources and participant observation. It is clear, however, that it would have been helpful to undertake qualitative interviews or focus groups and/or surveys to understand participants’ views on the process of adoption of management innovation. Emails from the researcher’s personal email account did, however, provide some personal views. Moreover, the extensive gathering of material included: (1) a Knowledge Working report on a survey to evaluate the structure, role and practices of Knowledge Analysts; and (2) after action reviews of Knowledge Analyst and KW Community of Practice meetings and training events. This too provided further material of participants’ views. The views of ‘ordinary’ staff, however, were not within scope of this part-time study.

Table 3–8: Sources, format and derivation of material

EXTERNAL SOURCE	ELECTRONIC FORMAT	DERIVED FROM
Documents	PDF format	Internet Online databases
Web Pages	HTML format	Internet
INTERNAL SOURCE	ELECTRONIC FORMAT	DERIVED FROM
<i>Archival source</i>		
Documents	Microsoft PowerPoint	CD Shared electronic drives
	Microsoft Word	
	Microsoft Excel	
	Microsoft Project	
Intranet Pages	HTML Format	CD
<i>Situated source</i>		
Documents	Microsoft PowerPoint	Intranet
	Microsoft Word	Shared electronic drives
	Microsoft Excel	Personal email account
	Microsoft Outlook	(as attachments)
Emails	Microsoft Outlook	Personal email account Discussion groups
Web Pages	HTML Format	Intranet
Field notes	Microsoft Word	Participant observation

Source: original

Material from both external and internal sources was gathered. Internal sources of material were categorised using Mintzberg and Westley's (1991) levels of organisational change discussed in the literature evaluation in section 2.5.4 on page 72 in Chapter 2. The types of material gathered and their electronic sources is shown in Table 3–9.

Table 3–9: Types of material gathered and their electronic source

THEMES	EXAMPLES OF MATERIAL GATHERED	ELECTRONIC SOURCE					
		Documents	Emails	Discussion groups	Internet pages	Intranet pages	Field notes
EXTERNAL INFLUENCES							
Networks	External networks influencing organisational change	✓	✓		✓	✓	
Political	Political parties in office		✓		✓	✓	
	Political directives issued	✓	✓			✓	
	Political views of PuSA's strategy, structure or operations	✓	✓			✓	
Economic	Economic discourses	✓	✓			✓	
INTERNAL STATE							
Culture	PuSA's existing and future culture	✓	✓	✓			✓
Structure	PuSA's organisational structure	✓	✓	✓		✓	✓
	Knowledge Management structure	✓	✓			✓	
	Knowledge Working structure	✓	✓	✓		✓	✓

Systems	Governance (policies, processes and procedures)	✓	✓			✓	
	Recruitment (formal or informal)	✓					
	Training (formal or informal)	✓	✓	✓			
	Performance process and guidelines	✓					
	Meetings (agendas, minutes, outputs)	✓	✓	✓			✓
People	PuSA staff turnover influencing adoption	✓	✓	✓			✓
	Knowledge Working role (job description)	✓	✓	✓		✓	
	Knowledge Working practice (actual role)	✓	✓	✓		✓	
	Knowledge Working performance measures and guidance	✓	✓	✓		✓	
	Knowledge Working competence (training, education or skills)	✓	✓	✓			✓
INTERNAL STRATEGY							
Vision	PuSA's economic development strategy	✓	✓				
	PuSA's annual reports	✓					
	PuSA's vision for organisational change (as discourse)	✓	✓		✓	✓	
	Knowledge Working strategy and architecture	✓					
Positions	PuSA's organisational remit	✓	✓			✓	✓
Programmes	Knowledge Web (plans and resources).	✓				✓	
	Business Transformation (aim, plans, resources etc.)	✓				✓	✓
	Business Improvement (aim, plans, resources etc.)	✓	✓				

	Knowledge management (aim, plans, resources etc.)	✓			✓		✓
	Knowledge working (aim, plans, resources etc.)	✓	✓	✓		✓	✓
Facilities	Knowledge working tools	✓	✓	✓		✓	✓

Source: original

3.5.4 Processing and coding of material

As the material was gathered it was put into some semblance of order. This process of 'simplifying' material (Miles & Huberman, 1984 in Darke, Shanks & Broadbent, 1998 p. 285) began in January 2004 and ended in May 2007 (coinciding with the period of the researcher's employment in PuSA). To simplify the material it was manually sorted into electronic folders as it was gathered. Files were renamed, if required, to include dates to aid chronological searching. Once this one done, these thematic folders were grouped by category. For example, the 'Knowledge Working' theme folder included various category folders such as 'strategy', 'people' and 'tools'. A similar exercise was undertaken for the email data. All emails attachments were saved as documents and arranged as above. Instead of undertaking the time-consuming task of saving individual emails and threads as a text document, they were imported into Microsoft Outlook and placed into theme folders and then manually grouped into category folders. See Figure 3–2 on page 121 and Figure 3–3 on page 122.

These electronic folders effectively formed an extensive material archive from which material could be selected and reduced into data. This strategy of electronic filing proved a useful means to search for specific content within documents and emails. For example, emails could be filtered by date, author, recipient, subject, or conversation. In addition, the content within specific emails could be searched by those grouped in a theme or category.

Figure 3–2: Manually sorting material into folders

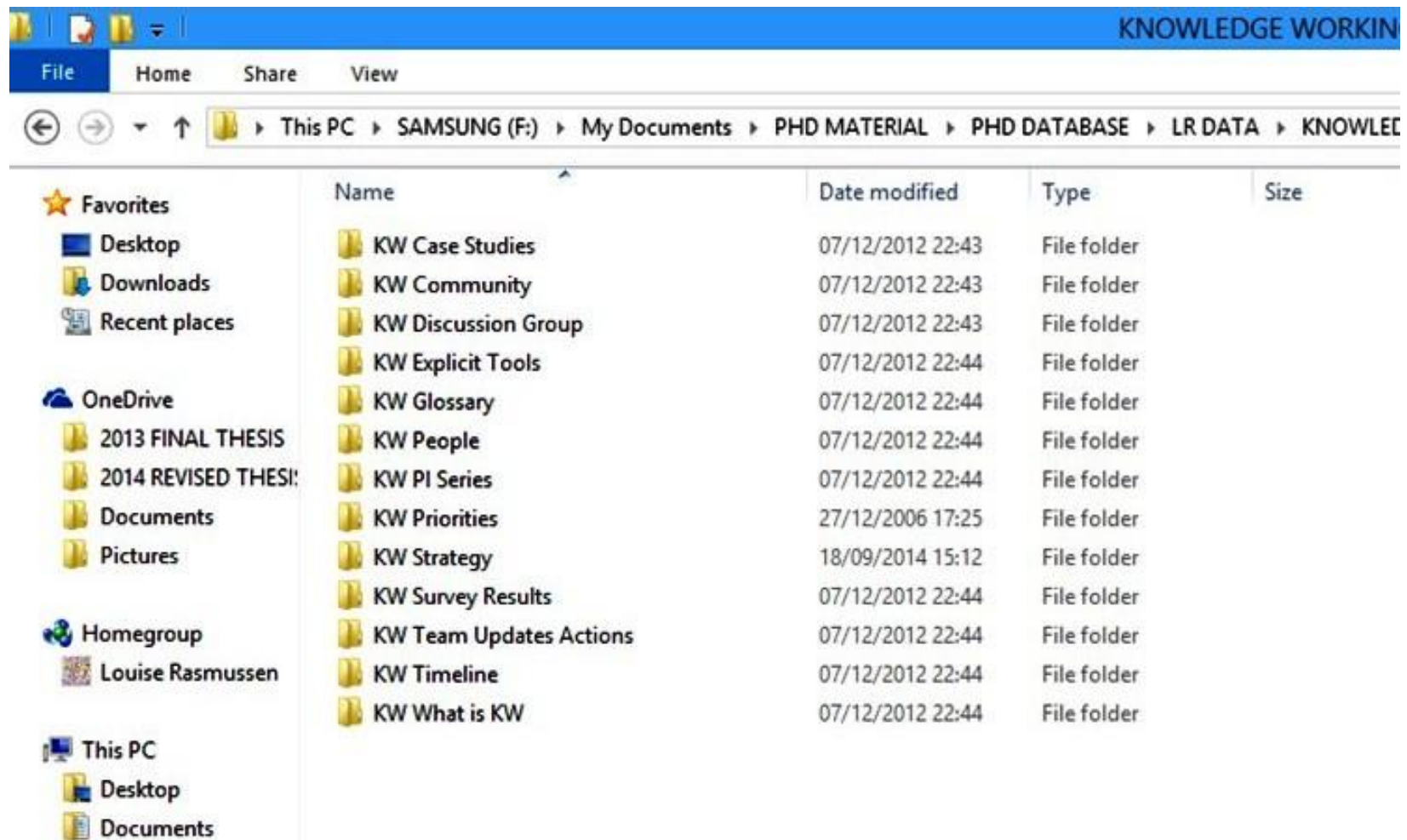
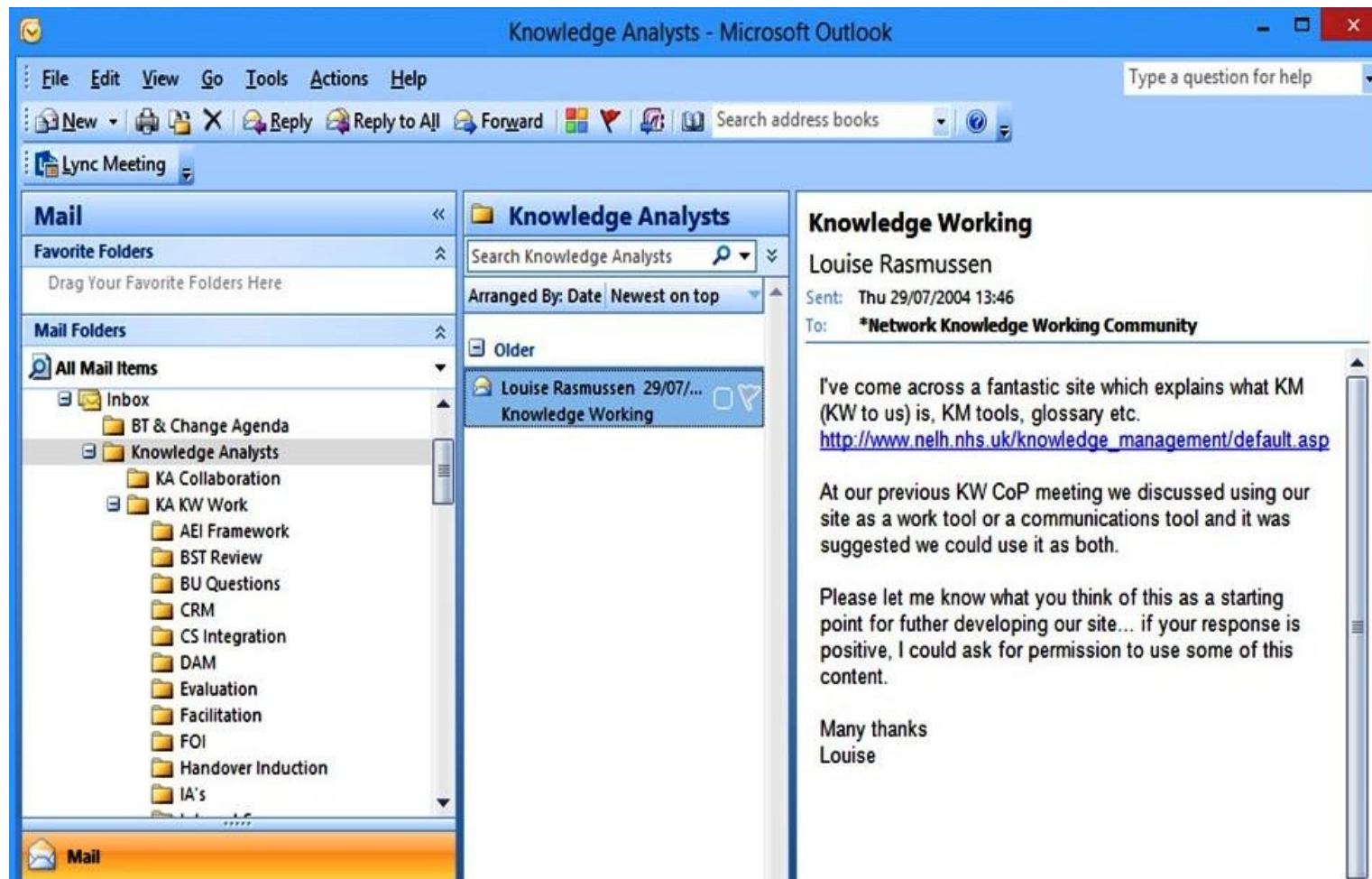


Figure 3–3: Manually sorting emails into folders



The use of qualitative software can aid the reduction process as coding effectively reduces the material into data (Miles & Huberman, 1994). An initial electronic coding exercise was undertaken in January 2006 using ATLAS.ti, a qualitative software package. This software allowed documents to be uploaded with tables, graphs or other graphical elements. Five documents were chosen for this initial coding exercise:

- PuSA's Future-State Operating Model (or organisational chart);
- Knowledge Architecture (setting out 'what needed to be done');
- Knowledge Working Strategy (setting out 'how to do it');
- Knowledge Analyst job description;
- Knowledge Analyst performance guidance.

These were significant documents as they were written during Business Transformation Programme 2 and approved by PuSA HQ Senior Management. They reflected the vision for, and practices associated with, Knowledge Working. The initial electronic coding exercise revealed that there were a number of broad categories (or attributes of Knowledge Working) that could be used to reduce the material further (see Figure 3-4).

Figure 3–4: Electronic codes

ELECTRONIC CODES	STRATEGY	Network-wide
		Subsidiary
	STRUCTURE	Formal (operating model)
		Informal (CoP)
	RECRUITMENT	Formal
		Informal
	MANAGEMENT	Formal
		Informal
	ROLES	Formal (job description)
		Informal (allocated roles)
	WORK	Network-wide
		KW Team
		Subsidiary
	COMPETENCE	Education/skills
		Training
	PERFORMANCE	Group
		Individual
	LANGUAGE USE	Vocabulary
Definitions		

Source: original

Coding, however, was not without problems. The first difficulty encountered in coding additional material using ATLAS.ti was the loss of context when coding a fragment, sentence, or paragraph in the documents. The material was best read as a contextual whole to piece together a thick description of 'what was said' and 'what was done' (Hall, 2001 p. 72 in Wetherell et al, 2002). The second problem encountered was the laborious and time-consuming process of manually saving and renaming thousands of emails in order to upload them into ATLAS.ti. This seemed counter-productive when Microsoft Outlook could be used to store and search the material. As a consequence, the further electronic coding of material was abandoned in favour of manual methods to aid the process of reducing material into data.

The use of manual methods to reduce material into data is not an uncommon approach when working with longitudinal qualitative material (for example, Wetherell et al, 2002). A manual process of reducing material first involved reading through the documents and emails in the electronic archives to judge its significance. This process is suggested by a number of authors who use documentary materials in their research (for example, Carabine, 2001; Wetherell et al, 2002; Cepeda & Martin, 2005).

Following the reading of material, a number of chronological timelines were constructed as shown in Table 3–10. This chronological method is commonly used in process (Poole, Van de Ven, Dooley & Holmes, 2000) and longitudinal case study research (Yin, 2003).

Table 3–10: Chronological timelines

Chronological Timelines	Description of timeline contents	Levels				
		External	Pan-organisational	Headquarters	Subsidiary	Knowledge Working
Context	Contextual factors influencing change in PuSA	✓	✓	✓	✓	
People	Staff recruitment and turnover			✓	✓	✓
Events	Meetings and training events		✓	✓	✓	✓
Tools	Introduction of 'tools' and technology		✓			✓
Practice	Factors influencing Knowledge Working adoption		✓	✓	✓	✓

Source: original

The data that appeared in the chronological timelines was placed in electronic files and folders. This constituted the beginnings of a case study database. This database was not a static data archive. It was necessary to return to the extensive material archive on numerous occasions whilst constructing the timelines and case study database. This cyclical process continued until: (1) the timelines and data reflected the adoption of Knowledge Working in PuSA; and (2) the case study database contained all the data referred to in the timelines.

The individual timelines were later amalgamated to form a single chronological timeline of key events and texts (see Appendix A). This chronological method is useful because important events do not necessarily happen at the point of observation, and researchers cannot determine that an event is significant when it takes place (Czarniawska, 2004). The construction of this post-hoc chronological timeline not only helped transform material into data, but also helped display the material in a chronological format for manual coding and data analysis.

The codes derived from the literature review in Chapter 2 and the data are shown in Figure 3–5. In order to draw conclusions from the data, manual codes were assigned to the events and texts on this timeline (see Figure 3–6).

Figure 3–5: Manual timeline codes

MANUAL CODES	CONTEXT	External		
		Internal		
	LEVEL	Organisational change		
		Management innovation		
	DECISIONS	Informal		
		Formal		
	PHASES	Initiation		
		Implementation		
		Outcomes		
	EPISODES	Agenda-setting		
		Research/knowledge		
		Matching		
		Persuasion		
		Modification		
		Operationalisation	Experimentation	
			Roll-out	
			Ad-hoc	
		Clarification/confirmation		
		Discontinuance		
	TASK FORCE	Strategy		
Structure				
Management				
Recruitment				
Training				
Role				
Tools				
Performance				
Communication				

Source: original

Figure 3–6: Example of manual codes assigned to events and texts on the chronological timeline

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
106	105	2002	Nov	IN	INNOV	DEC	IMP	OPERA		RECRUIT	KAs recruited: Sarah, Ashcroft; Jane, Berwick; Alison, Carnegie; Bonni, Dunstane; Arthur, Glenview; Gail, N	DOC	HTML	CD
107	106	2002	Nov	IN	INNOV		IMP	OPERA		COMMS	Informal KA monthly meetings established to share implementation experiences	DOC	WORD	CD
108	107	2002	Nov	IN	INNOV		IMP	OPERA		STRUC	KW meeting output re: hopes and fears: will KW team disappear? Lack of clarity about work and scope (No	DOC	WORD	CD
109	108	2002	Dec	IN	INNOV		INIT	MATCH	VALID	ROLE	Role of KAs in PuSA presentation: KW champions; busines analysis; community development; intranet and	DOC	PPOINT	CD
110	109	2003	Jan	IN	INNOV		IMP	OPERA	ROLL	COMMS	KW discussion group introduced (November 2002)	WEB	HTML	INTRA
111	110	2003	Jan	IN	INNOV		IMP	OPERA	VALID	COMMS	KA communications planning (January 2003)	DOC	WORD	CD
112	111	2003	Jan	IN	INNOV		IMP	OPERA	VALID	COMMS	KW intranet page: a day in the life of a KA (January 2003)	INTRA	HTML	CD
113	112	2003	Jan	IN	CHAN	DEC	IMP	CLARIF		COMMS	All Staff 'One Network' workshops (January 2003)	DOC	WORD	CD
114	113	2003	Feb	IN	INNOV		IMP	CLARIF	VALID	STRAT	What is KW? Design Authority clarification paper (February 2003 later revised February 2004)	DOC	WORD	INTRA
115	114	2003	Feb	IN	INNOV	DEC	IMP	CLARIF	VALID	PERF	KM value Design Authority paper: BT overall emphasis on efficiency; customer service, network cohesion - a	DOC	WORD	INTRA
116	115	2003	Mar	IN	INNOV		IMP	CLARIF		ROLE	Role of KAs in PuSA presentation: KW cross-cutting initiatives to delivery a 'one network' approach to our wd	INTRA	PPOINT	CD
117	116	2003	Mar	IN	INNOV		IMP	CLARIF		ROLE	On a news item on the Intranet Knowledge Analysts are described as 'catalysts to bring about a change in d	INTRA	HTML	CD
118	117	2003	Mar	IN	INNOV		IMP	CLARIF		ROLE	In an email to Louise, Marlene says: 'Your role is to take an overview of everything that is being asked of the	EMAIL	OUT	PEA
119	118	2003	Apr	IN	INNOV		IMP	OPERA		RECRUIT	KW Team recruited (formal structure comprises BT Knowledge Workstream members) (April 2003)	DOC	WORD	CD
120	119	2003	Apr	IN	INNOV		IMP	OPERA	ROLL	STRUC	KW Team incorporated into KM Directorate (April 2003)	DOC	WORD	CD
121	120	2003	Apr	IN	INNOV	DEC	IMP	OPERA		RECRUIT	KAs recruited: Ross, HQ; Lorna, Strathyre; Kyle, Kirklea	DOC	WORD	INTRA
122	121	2003	Apr	IN	CHAN	DEC	IMP	MODIF		RECRUIT	KA additional recruitment: Bonni, HQ	INTRA	HTML	INTRA
123	122	2003	Apr	IN	INNOV		IMP	CLARIF		ROLE	Role of KA in subsidiaries draft presentation developed (April 2003)	DOC	PPOINT	INTRA
124	123	2003	Apr	IN	INNOV		IMP	OPERA	EXPERI	TOOLS	PuSA intranet 3 launch delayed till December 2003	DOC	WORD	INTRA
125	124	2003	Apr	IN	CHAN		IMP	CLARIF	VALID	STRAT	PuSA 'Big Picture Story' presentation re: one network working circulated to PuSA staff (April 2003)	DOC	PDF	CD
126	125	2003	May	IN	INNOV		IMP	OPERA		TRAIN	Cynefin Modelling technology guidance introduced (May 2003)	DOC	WORD	CD
127	126	2003	May	IN	INNOV		IMP	OPERA		TRAIN	Business Needs Analysis guidance introduced (May 2003)	DOC	WORD	CD
128	127	2003	May	IN	INNOV		IMP	OPERA		TRAIN	Social Capital Analysis guidance introduced (May 2003)	DOC	WORD	CD
129	128	2003	May	IN	INNOV		IMP	OPERA		TRAIN	Architecture guidance introduced (May 2003)	DOC	WORD	CD

Source: original

3.5.5 Data analysis

A research framework derived from the evaluation of literature has been developed for this study. Table 3–7 shows a number of episodes in three phases (initiation, implementation, and outcomes) that would be anticipated in the process of adoption of management innovation. The analysis considers whether this is the case. The contextual factors (for example, organisational setting; networks involved; power and conflict) influencing management innovation are key considerations too. The analysis also investigates decision-making, as this is a key feature of the process of adoption of management innovation. A summary of the literature in Chapter 2 helped guide the analysis (see Figure 2–5 on page 80).

The case report explores and describes three phases (initiation in Chapter 4; implementation in Chapter 5; and outcomes in Chapter 6) and episodes in the process of adoption of 'Knowledge Working' (a programme of Knowledge Management) in PuSA. Episodes in each phase of the process of adoption of Knowledge Working in PuSA were identified from coding aligned to events and texts on the chronological timeline in Appendix A. The episodes in the timeline matched those anticipated in the research framework in Table 3–7 on page 112. The findings in the case report in Chapters 4, 5 and 6 are therefore reported under episodes in each phase of the process of adoption of Knowledge Working in PuSA.

The analysis Chapters 4, 5 and 6 provides a credible account through 'thick description' of the process of adoption of Knowledge Working (a programme of Knowledge Management) within PuSA. Chapter 4 begins with an investigation of the contextual factors between 1995 and 1999 leading up to the decision to initiate first one, then another, programme of organisational change in PuSA (K-Web Programme 1 in 1999 and BT Programme 2 in 2000). The remainder of Chapter 4, and Chapters 5 and 6, investigates the process of adoption of Knowledge Working (a programme of Knowledge Management) between 2000 and 2008 within this wider context of organisational change.

Four discourses (a 'fiefdom' and 'one network' discourse at pan-organisational level and a corresponding 'local delivery' and 'network delivery' at subsidiary level) were identified during the empirical analysis in Chapter 4. These discourses were representative of the ambition (or agenda) for organisational change in PuSA between 1999 and 2008. These four discourses are drawn in Chapter 4 and 5 to explore whether Knowledge Working matched (was compatible with) the overall agenda for 'one network' change. These discourses are also used to explore problems in the implementation phase of Knowledge Working in Chapter 5.

Acronyms used in all analysis Chapters 4, 5 and 6 include:

- Knowledge Analyst (KA), for example, KA role;
- Knowledge Web (K-Web), for example, K-Web Programme 1;
- Business Transformation (BT), for example BT Programme 2;
- Knowledge Working (KW), for example, KW Workstream and KW Team;
- Knowledge Management (KM), for example, KM Directorate.

The events and texts referred in the analysis Chapters 4, 5 and 6 (marked with #) are cross-referenced to the line numbers in the chronological timeline in Appendix A.

Pseudonyms have been used throughout this thesis to preserve the anonymity of the organisations and participants. Those used for subsidiaries and individual actors appear in Table 5–2 on page 185 and Table 5–3 on page 186 in Chapter 5.

The findings of each chapter contributes evidence that is relevant to addressing all the study's research questions (RQs 1-9) as noted in Table 1-1 on page 3 in Chapter 1. These empirical material from the analysis of Chapters 4, 5 and 6 (initiation, implementation, and outcomes phases of the adoption process) is discussed in Chapter 7 with direct relevance to the new insight that the full study reveals on the process of adoption of a management innovation in an organisational setting.

Figure 3–7: Research framework of phases, anticipated episodes, and decision-points in the process of adoption of management innovation

EXTERNAL AND INTERNAL CONTEXT			
Phases	Terms used as labels for episodes in the analysis chapters 4, 5 and 6	Episodes that appear in the five processes of innovation that have similar content (see Error! Not a valid result for table. on page 37 in Chapter 2).	Decision-making
Initiation (Phase 1)	Agenda-setting	Dissatisfaction with the status quo (Birkinshaw & Mol, 2006)	<i>Decisions-between-alternatives within episodes</i>
		Motivation (Birkinshaw, Hamel & Mol, 2006)	
		Needs/problems (Rogers, 2003)	
		Agenda-setting (Rogers, 2003)	
	Knowledge/research	Inspiration (Birkinshaw & Mol, 2006)	
		Research (Rogers, 2003)	
		Knowledge (Rogers, 2003)	
	Matching	Matching (Rogers, 2003)	
	Persuasion	Persuasion (Rogers, 2003)	
	<i>Decision-point: an adoption/rejection decision that marks the transition between phases</i>		

Implementation (Phase 2)	Modification	Modification (Rogers, 2003)	<i>Decisions- between- alternatives within episodes</i>
	Operationalisation	Implementation (Birkinshaw, Hamel & Mol, 2008; Rogers; 2003)	
	Clarification/ confirmation	Internal and external validation (Birkinshaw & Mol, 2006)	
		Theorisation and labelling (Birkinshaw, Hamel & Mol, 2008)	
		Confirmation (Rogers, 2003)	
Clarifying (Rogers, 2003)			
<i>Decision-point: an adoption/rejection decision that marks the transition between phases</i>			
Outcomes (Phase 3)	Routinisation	Routinisation (Rogers, 2003)	
	<i>An adoption/ rejection decision that marks a transition between episodes</i>		
	Discontinuance	Disenchantment/dissatisfaction or replacement (Rogers, 2003)	

Source: original

3.6 Evaluation of qualitative research

In general there has been a debate on how to assess qualitative social research. This debate stems from the desire to find criteria, other than validity, reliability and generalizability to evaluate social science research (see Yin, 2003). The reason for this is that these positivist criteria are not considered suitable for evaluating the diversity of perspectives and approaches found in qualitative research today (for example, Golden-Biddle & Locke, 1993; Seale, 1999; Klein & Myers, 1999; Lincoln & Guba, 2005; Easterby-Smith, Golden-Biddle & Locke, 2007; and Tracy, 2010). To address this, Tracy (2010 p. 16) provides eight 'big tent' criteria for demonstrating and evaluating qualitative research: (1) a worthy topic; (2) meaningful coherence; (3) significant contribution; (4) resonance; (5) rich rigor; (6) sincerity; (7) credibility; and (8) ethical concerns.

Tracy (2010 p. 837) proposes that these criteria provide a 'parsimonious pedagogical tool' for excellent qualitative research. This does not mean that these are the only criteria, or indeed that they should be universally applied to each and every study (Tracy, 2010). Rather, they can be applied on a flexible basis to reflect the research discourse (normative, interpretive, critical or dialogical) and methods employed. For example, historical case studies or methods primarily using documentary material (as is the case in this thesis) would not employ member checks to demonstrate the credibility of their research.

The following eight 'big tent' criteria (in italics) are used as a suitable framework to assess whether:

1. This study is of a *worthy topic* addressing a gap in the literature;
2. There is *meaningful coherence*, or interconnection, between chapters to meet the research questions;
3. The research findings provide a *significant contribution to knowledge*;
4. There is *resonance*, or transferability, of practically useful findings;
5. There is *sincerity* and transparency about methods used and challenges faced in designing and conducting this research;

6. There is *rich rigour* in the design of this research;
7. The use of thick description in the analysis conveys a *credible* account of the 'story' of the process of adoption of a management innovation in an organisational setting;
8. There is a concern with procedural, situational, relational and exiting research ethics (Tracy, 2010 p. 837).

Reference is made to some of these criteria in this chapter, for example: (1) the initial approval for the research at PuSA shows a concern with research ethics (see section 3.3.2); (2) problems in designing and conducting this research (for example, limitations in method choice; and manual coding of data) is discussed in section 3.3.2, section 3.5.3 and section 3.5.4 above; and (3) resonance with a practitioner audience is covered in section 3.3.2. In the conclusion to this thesis, the remaining 'big tent' criteria have been used to reflect on the research presented in this thesis. The conclusion Chapter 8 reviews the research questions, discusses contributions to knowledge, assesses suitability of research design, and suggests recommendations for further research.

3.7 Summary and conclusion to this chapter

The methods described in this chapter allowed for the research to address the main research question of: *what is the process of adoption of management innovation in an organisational setting?* A pragmatic approach to research design was executed, taking into account the particular circumstances of the case study organisation and the position of the researcher within it. A mix of external and internal qualitative material was collected from a variety of sources. The construction of a chronological timeline of Knowledge Working as a management innovation in PuSA helped generate the data set for analysis. In the following Chapters 5, 6 and 7 the output of the analysis can be found for the initiation, implementation and outcomes phases of the adoption of Knowledge Working at PuSA.

4 Chapter 4: The initiation phase of Knowledge Working (1999-2003)

4.1 Introduction

This first analysis chapter (of three) explores and describes the initiation phase of the process of adoption of 'Knowledge Working' (which elsewhere would be recognised as Knowledge Management) as a management innovation in PuSA. From the research framework (see Figure 3–7 on page 133) in Chapter 3 four episodes in this initiation phase would be anticipated. See Table 4–1.

Table 4–1: Anticipated episodes in the initiation phase of the process of adoption of Knowledge Working in PuSA

Terms used as labels for episodes in the analysis	Episodes that appear in the five processes of innovation in Chapter 2 that have similar content (see Figure 2–1 on page 36).
Agenda-setting	Dissatisfaction with the status quo (Birkinshaw & Mol, 2006)
	Motivation (Birkinshaw, Hamel & Mol, 2006)
	Needs/problems (Rogers, 2003)
	Agenda-setting (Rogers, 2003)
Knowledge/research	Inspiration (Birkinshaw & Mol, 2006)
	Research (Rogers, 2003)
	Knowledge (Rogers, 2003)
Matching	Matching (Rogers, 2003)
Persuasion	Persuasion (Rogers, 2003)

Source: original

This chapter investigates whether this was the case at PuSA. The contextual factors that influenced the process of organisational change and management innovation are key considerations (see section 2.5 on pages 60-75 in Chapter 2). The analysis also investigates decision-making, as this is a key feature of the process of adoption of management innovation. For these reasons, these issues also feature in this chapter.

The findings of this first chapter and those that follow (Chapters 5 and 6) contributes evidence that is relevant to addressing all the study's research questions (RQs 1-9). See Table 1–1 on page 3 of Chapter 1.

Acronyms used in all analysis chapters include:

- Knowledge Analyst (KA);
- Business Transformation (BT);
- Knowledge Web (K-Web);
- Knowledge Working (KW);
- Knowledge Management (KM).

The events and texts referred in this chapter (marked with #), and Chapters 5 and 6 that follow are cross-referenced to the line numbers in the chronological timeline in Appendix A.

The analysis to be presented reveals that Knowledge Working at PuSA was a product of, and a product for, organisational change. PuSA's ambition for organisational change from one state to another is expressed here as discourses. The four main discourses (pan-organisational 'fiefdom' and 'one network' discourses and corresponding subsidiary 'local delivery' and 'network delivery' discourses) reveal the compatibility of Knowledge Working tools selected by PuSA, and the planned infrastructure to implement them within organisational structures of signification (meaning), domination (power) and legitimation (norms). This draws on the content of the literature evaluation in section 2.3.2.2 on page 45 in Chapter 2.

4.2 Contextual factors for organisational change in PuSA between 1999 and 2003

The contextual background to the public sector agency (PuSA) in which this research was conducted can be seen in section 3.3.1 on page 90 in Chapter 3. This background covered: (1) the establishment of the organisation and its operation to 2008; (2) three organisational change programmes introduced between 1999 and 2008 (Knowledge-Web, Business Transformation, and Business Improvement); and (4) Knowledge Management and its characterisations in the organisation. Of interest to the analysis here is organisational change programmes 1 and 2 (labelled 'K-Web' and 'BT' in PuSA) as this corresponds with the initiation of Knowledge Management in 1999 and Knowledge Working in 2001. The analysis thus begins with external and internal contextual factors that motivates: (1) HQ CEO 1 to initiate K-Web Programme 1 in April 1999, and (2) HQ CEO 2 to initiate BT Programme 2 in March 2000.

First, the role of external and internal networks as influencing contextual factors for organisational change in PuSA is studied. Thereafter, external and internal factors as influencing contextual drivers for organisational change is explored.

4.2.1 The role of external and internal networks influencing organisational change in PuSA (1995-2003)

In PuSA, two external networks (cultural and political) and two internal networks (hierarchical and innovation) were found to play a role in organisational change in PuSA between 1995 and 2003.

External networks include:

- *A cultural network* (in general, media, consultants, academics and gurus) associated with: (1) diffusing economic discourses such as the knowledge economy and e-business; and (2) developing and diffusing associated practices (for example, Knowledge Management) leading to a mimetic strategy of adoption;
- *A political network* (for example, UK Government, Scottish Office and Scottish Executive) associated with issuing political directives that govern PuSA's organisation's strategy, structure and operations leading to a political strategy of adoption.

Internal networks include:

- *A management network* typically comprising HQ Senior Management (CEOs 1 & 2 and Senior Managers) who have the legitimate power to make and enforce pan-organisational decisions, and resource power to control the allocation of resources;
- *An innovation network* in BT Programme 2 comprising a cross-section of PuSA staff brought together to: (1) to seek internal and external 'opportunities' to change the organisation (an Innovation Group); and (2) to make decisions to adopt, modify or reject ideas (a BT Change Board).

Reference is made to the roles these external and internal networks played in influencing organisational change in the analysis that follows.

4.2.2 External factors for organisational change in PuSA (1996-2001)

Three external factors or 'drivers for change' (labelling used in PuSA) between 1996 and 2001 relating to changes in the economic and political context have been identified. These will be considered next.

The first driver for organisational change was the changing economic context which PuSA first became aware of in 1996 (#8). These changes were diffused by cultural network and can be expressed as a 'knowledge economy' (#1) discourse and an 'e-business' (#10) discourse. A page on PuSA's intranet (circa 2000) highlights that these two discourses signalled economic change on a world-wide scale: (1) a knowledge economy discourse where 'the world has moved from an industrial to a knowledge economy'; and (2) an e-business discourse where 'e-business is transforming the world economy and every area of life' (#40). An Innovation Group drew on the economy discourse in 1998 to persuade HQ Senior Management to introduce Knowledge Management in PuSA (#15). The e-business discourse is reflected in a 1999 UK Modernising Government initiative introduced to modernise public services (#20). These discourses thus played a role in HQ Senior Management's decision to transform PuSA into a 'knowledge-based e-business' between 1999 and 2004 (# 38).

Another second driver for organisational change was the devolution of some political powers (for example, power over economic development) to Scotland between 1997 and 1999 (#15, #19). A conference paper written by three members of PuSA staff in 2002 shows that from 1997 onwards the organisation was subject to a 'new era of heightened [political] accountability and intense scrutiny' (#86). For example, a news release issued by the Scottish Office in 1997 shows 'that [Scottish] Ministers will be taking a close interest in the strategic direction of [PuSA]' (#13). The Scottish Executive exercised legitimate power to either change or influence PuSA's strategy, structure and operations from 1997 onwards (see organisational context in section 3.3.1 in Chapter 3). In December 1998 the Secretary of State for Scotland 'challenged [PuSA] to take a lead in building the new knowledge-based economy' (#17). The outcome of

this challenge (together with a stakeholder consultation) was the publishing of a new PuSA economic development strategy in 1999 'to help Scotland's economy meet the global challenges for the 21st century' (#25).

The final (and third) driver was the launch of a UK Modernising Government initiative in March 1999 (#20). This modernisation programme can be conceived as a coercive strategy by the UK Labour Government, as stated in a white paper, 'to reform [...] the public sector, including issues of efficiency, effectiveness and customer service' (#20). All public sector organisations were expected to modernise and transform their services using electronic means by 2008. A page on PuSA's intranet (circa 2000) shows that public sector 'services [had to be] available 24 hours a day, 7 days a week, where there is a demand [for them]' (#38). As a consequence, PuSA's K-Web Programme 1 not only had to incorporate PuSA's view that knowledge was central to its delivery of economic development services, but also the UK Labour Government's directive to implement e-business. With the introduction of this modernising programme PuSA's vision for organisational change changed from becoming a 'knowledge-based organisation' in 1998 (#15) to a 'knowledge-based e-business' in 1999 (#38).

The analysis above indicates that the cultural network played an indirect mimetic role in influencing organisational change in PuSA. The political network, in contrast, played a direct coercive role in influencing organisational change in PuSA. These external factors, together with internal factors, motivated HQ Senior Management to consider introducing organisational changes in PuSA between 1999 and 2004.

4.2.3 Internal factors for organisational change in PuSA (1996-2001)

Three internal factors (or drivers for organisational change in PuSA) between 1996 and 2001 are explored here. The analysis here shows that: (1) key individuals; (2) a supportive organisational context; and (3) a change in strategic direction all influence organisational change.

The first internal driver for organisational change was the return of HQ Strategic Futures Director (called Angus here) to PuSA from secondment at a global consultancy network between 1995 and 1996. Whilst on secondment Angus became aware of, and increasingly interested in, the knowledge economy discourse (#86). On his return to PuSA in 1996, Angus incorporated the cultural network's knowledge economy ideas into a presentation that 'powerfully described how the knowledge economy' represented 'a change in age' from industrial and agricultural economics (#86). At a Knowledge Management Conference in London in 1997, Angus states that 'it is this emergent knowledge economy which provides the context for our concern with Knowledge Management in our organisations' (PuSA Director of Strategy quote in Chase, 1997 p. 83). It is this link between the knowledge economy and Knowledge Management discourses that inspired organisational change in PuSA.

A second internal driver for organisational change was HQ Senior Management's support for new thinking. The HQ Strategic Futures Director (called Angus) and his team 'of about ten staff enjoyed the freedom to think differently and [diffuse] new ideas [surrounding the knowledge economy within and outwith PuSA between 1996 and 1999]' (#86).

- The HQ Strategic Futures Team were given the freedom to present this 'change of age presentation' to PuSA staff between 1996 and 1999. This presentation was meant to help staff theorise, that is make sense of, the knowledge economy 'to build a rationale for strategic change' (#86). The diffusion process ensured that the 'concept of the knowledge economy was readily debated amongst [PuSA] staff (#86). This debate, in turn, 'significantly

helped progress the organisations thinking and activities' with regards to economic development in Scotland (# 86);

- The HQ Strategic Futures Team were also given the freedom to diffuse the 'change of age' presentation to external organisations. This presentation was diffused 'well over a hundred times to captivated audiences both within and outwith [PuSA]' over a period of three to four years (#86). This early 'evangelising' process set the scene for the introduction of an extensive public consultation on PuSA's future strategic direction in 1998 (#86). The public consultation (and stakeholder challenge mentioned in the second external driver for organisational change above) culminated in the publishing of a new PuSA economic development strategy 'in 1999 (#25).

A third driver for change was PuSA's new economic development strategy in 1999 'to meet [knowledge economy] challenges' (#25). HQ Senior Management requested 'an early discussion of the implications for operationalising the new [PuSA] strategy' (#15). Following this request, a 1998 management paper titled 'Implementing the new [PuSA] strategy – [PuSA] as a genuine knowledge-based organisation' was jointly presented to HQ Senior Management by an Innovation Group (#15). In an email from an HQ member of staff to other Innovation Group colleagues in November 1998, this paper was described as a 'visioning piece' written to 'get buy-in' to introduce Knowledge Management in the organisation (#16). The Innovation Group argued that 'if the economy is to be increasingly driven by the generation, sharing and use of knowledge, then [PuSA] will similarly have to have this at its core' (#15). Knowledge Management was presented as a means to change PuSA's 'ways of working' in order to become 'a genuine knowledge-based organisation', one which could operate effectively in the new knowledge economy (#15). Following this consultation HQ CEO 1 made an authoritative decision to initiate a K-Web Programme 1 (#21).

A fourth, and final, driver for change was the appointment of HQ CEO 2. His, and HQ Senior Management's, view was that 'every aspect of [PuSA] had to be rethought and redefined' (#42). In March 2000 HQ CEO 2 made an authoritative decision to change the £5m K-Web Programme into a £87m BT Programme 2 (# 35). On PuSA's intranet this programme is described as 'our way of ensuring that [PuSA] meets, and where possible, exceeds [modernising government] targets and commitments' (#42). HQ Senior Management 'seized on [K-Web] as an excellent ready-built platform for a much wider and more ambitious change planning process' (#42). It was within this BT Programme 2 that Knowledge Working was initiated in July 2001. In a detailed business agenda document it says that: 'Knowledge Working is the name of our Knowledge Management project within Business Transformation' (#76). Knowledge Working was thus an extension of Knowledge Management in PuSA.

There were two significant Knowledge Management outcomes of K-Web Programme 1 that is relevant to further analysis:

- One outcome was the introduction of Knowledge Management directorate (labelled the 'KM Directorate' in PuSA) that included 'the functions that were previously known as strategy and planning' (#51). This KM Directorate absorbed the HQ Strategic Futures Team as HQ Senior Management felt that their strategic ideas regarding the knowledge economy had 'sufficiently permeated mainstream thinking' (#86);
- Another outcome was the development and implementation of a Knowledge Management Information System in April 2001 (#69). This system was developed to capture financial, planning and reporting information against PuSA's projects and services. Capturing this information was important as 'the [Scottish Executive] political mantra of "do more with less" ushered in a stronger focus on numerical (output/impact) targets' (#86). The system was thus introduced to validate PuSA's role in economic development by demonstrating that its operations were yielding valuable results.

4.3 Episodes in the initiation phase of Knowledge Working in PuSA (2001 – 2003)

The analysis of coding in the chronological timeline in Appendix A found that there is evidence of four episodes in the initiation phase of Knowledge Working: (1) agenda-setting; (2) knowledge/research; (3) matching; and (4) persuasion. These episodes were not linear but ran in parallel to each other (see Table 7–4 on 298 in Chapter 7).

4.3.1 The role of external and internal networks across all episodes in the initiation phase of Knowledge Working (1999-2003)

An external cultural network (Thrift, 2005) played a direct role in the initiation phase of the process of adoption of Knowledge Working. Three management consultancy firms were appointed between 1999 and 2002 to help HQ Senior Management initiate organisational change in PuSA (#22; #36; #72). See Table 4–2. The management consultants' involved in K-Web Programme 1 and BT Programme 2 had both 'referent' and 'expert' personal bases of power (Rollinson et al, 1999) to: (1) set the agenda for organisational change in the agenda-setting episode; (2) undertake research to identify either internal or external 'opportunities' for organisational change in the knowledge/research episode; and (3) select opportunities that matched the agenda for organisational change, and help plan for implementation in the matching episode.

Table 4–2: Management consultancy firms appointed to help PuSA in the initiation phase of organisational change (1999 – 2002)

PuSA change programmes	Management consultancy firms appointed
K-Web Programme 1 (April 1999-March 2000)	PA Consulting Group: appointed April 1999 (#22)
BT Programme 2 (March 2000-June 2003)	Cap Gemini Ernst & Young (CGE&Y): appointed March 2000 (#36)
	Deloitte and Touche: appointed July 2001 (#72)

Source: BT Programme 2 evaluation document, June 2005 (#384)

The appointment of these external management consultancy firms helped ‘validate’ (Birkinshaw & Mol, 2006) K-Web Programme 1 and BT Programme 2. In a document on the intranet in 2001 it is mentioned that Cap Gemini Ernst and Young (CGEY) were ‘engaged to help [PuSA] with the [innovation] process, on the basis of their experience in transforming many other large organisations’ (BT FAQ’s, 2001 p.4) (#42). The other two consultancy firms were also appointed in a competitive tendering process. They too were perceived to be ‘cognitive authorities’ (Wilson, 1982) on organisational change. These management consultancy firms worked directly with two internal networks between 1999 and 2002: a hierarchical and innovation network. Here, the innovation network includes:

- a central governance group (BT Change Board) who had the ‘legitimate power’ and ‘expert power’ (Rollinson et al, 1999) to make decisions to adopt, modify or reject ideas during BT Programme 2 (#384);
- a cross-section of PuSA staff (including the Design Authority and BT Knowledge Workstream in BT Programme 2 selected to work with management consultants to build their ‘referent power’ and ‘expert power’ (Rollinson et al, 1999) to implement innovations in PuSA (#384).

The role these external and internal networks played in the adoption of Knowledge Working will be explored further in the analysis that follows. The analysis begins the agenda-setting episode, followed by the knowledge/research episode, then the matching episode, and finally the persuasion episode.

4.3.2 The agenda-setting episode (1999-2003)

The agenda-setting episode begins with a general organisational need/problem that creates a perceived need for innovation (Rogers, 2003). First, the agenda for K-Web Programme 1 and BT Programme 2 between 2000 and 2002 is explored. Thereafter, the agenda for Knowledge Working for the same time period is considered.

4.3.2.1 Setting the agenda for organisational change in PuSA (2000-2002)

In PuSA early agenda-setting was observed in various CD documents and intranet pages describing the vision and objectives of the organisational change programmes 1 and 2:

- In K-Web Programme 1 (April 1999 to March 2000) there was: (1) a need to better assess and report on PuSA's performance; and (2) the need to 'acquire new infrastructure to enable knowledge sharing both internally and externally' (#28). As described above, these needs were based on demonstrating the advocacy of PuSA's economic development approach using numerical (or quantitative) output measures;

- In BT Programme 2 there was: (1) a need to introduce e-business as part of the 1999 UK Modernising Government initiative; and (2) a need to become more effective, efficient and customer-focused (#42, #384). This latter need was identified through: (1) an internal review of PuSA's structure and operations initiated by HQ CEO 2 in March 2000 (#37; #39) and; (2) an external review initiated by the Scottish Executive (PuSA's principal stakeholder) in July 2000 (#39, #60).

As BT Programme 2 progressed organisational needs became more specific. Five needs were expressed in a presentation of the timeline for organisational change in 2002 (#63):

1. A need to 'manage our performance [to create] an effective organisation that continually strives to improve itself';
2. A need to 'manage our knowledge and products [to create] an open culture that shares knowledge and best practice, and an organisation with consistent, accessible products [and services]'. It is this second need that Knowledge Working sought to address;
3. A need to 'deliver to the customer [by creating] a focused and responsive organisation that has one voice in the market and is easy to do business with';
4. A need to 'support and service the business [by creating] dedicated support and service functions allowing [PuSA] to benefit from being one organisation';
5. A need to 'deliver world class technology [by establishing] a single information communications technology team recognised for their delivery of best practice solutions to business needs through a commitment to world class processes'.

The ambition for organisational change in PuSA between 1999 and 2008 can be expressed as discourses: a ‘fiefdom’ and ‘one network’ discourse at pan-organisational level and a corresponding ‘local delivery’ and ‘network delivery’ at subsidiary level. See Table 4–3. The differences in pan-organisational ‘fiefdom’ and ‘one network’ discourses represented a ‘performance gap’ (Rogers, 2003) that Knowledge Working was meant to address.

These four discourses reflect *informal*, and in the analysis *formal*, organisational structures of signification (meaning), domination (power) and legitimation (norms) in PuSA (see section 2.3.2.2 on page 45 2.3.2.2in Chapter 2). These four discourses are drawn on in subsequent analysis and are therefore explored here.

Table 4–3: PuSA’s agenda for organisational change expressed as discourses

PAN-ORGANISATIONAL DISCOURSES (a change from one pan-organisational state to another)	
‘FIEFDOM’ (1999) Signification: autonomy Domination: decentralisation Legitimation: inconsistency	‘ONE NETWORK’ (2008) Signification: collaboration Domination: centralisation Legitimation: consistency
Signification: independence Domination: resource hoarding Legitimation: diversity ‘LOCAL DELIVERY’ (1999)	Signification: cooperation Domination: resource sharing Legitimation: uniformity ‘NETWORK DELIVERY’ (2008)
CORRESPONDING SUBSIDIARY DISCOURSES (a change from one subsidiary state to another)	

Source: original

The origins of a 'fiefdom' discourse can be traced to a K-Web Programme 1 presentation (circa 1999) the organisation was referred to as 'fiefdoms' (#29). In the management literature Herbold (2005) states that a 'fiefdom syndrome' occurs when individuals or groups (in PuSA's case its semi-autonomous subsidiaries) reshape and sustain their environments to gain or maintain managerial control. In PuSA this fiefdom syndrome can be seen in: (1) the replication of business support functions (for example, Information Technology and Human Resources); and (2) the duplication of mechanistic coordinating controls (for example, processes, procedures and systems) across the organisation. Moreover, competition between the agencies (later subsidiaries) was the norm, which manifested in a lack of collaboration, working in isolation, and 'turf protection' (#29). Movement of staff across PuSA was rare even though job functions in different geographic locations were essentially similar (#29). At a pan-organisational level a 'fiefdom' discourse is representative of: autonomous working; decentralised decision-making; and inconsistent operations. A corresponding 'local delivery' discourse reflects: independent working; resource hoarding; and diversity in subsidiary operations.

A 'one network' discourse dominated throughout the BT Programme 2 between 2000 and 2004. This discourse appeared in internal PuSA texts (#32, #92, #112) as well as external texts (#61, #384). This discourse was closely tied to the BT Programme 2 needs mentioned in section 4.3.2.1 on page 148. In PuSA the term 'one network' also referred to mechanistic coordinating controls and structural changes introduced by HQ Senior Management to ensure increasingly consistent, collaborative and centralised operations. These changes included: (1) creating a single PuSA brand; (2) consolidating products and websites; (3) implementing a consistent 'future-state operating model' (or organisational chart); (4) developing 'shared service back-office' functions (for example, Human Resources and Information Communication Technology); and (5) introducing uniform PuSA mechanistic coordinating controls (for example, common systems, processes, policies and procedures). At a pan-organisational level a 'one network' discourse represents: collaborative working; centralised decision-making; and consistent operations. A corresponding 'network delivery'

discourse represents: cooperative working; resource sharing; and uniformity in operations.

The 'one network' discourse is also representative of changes in PuSA's organisational structure. The 'one network' changes introduced between 2000 and 2004 resulted in a hybrid formal organisational structure (Rogers, 2003). This can be labelled a 'divisionalised-machine bureaucracy' structure (Mintzberg, 1980). Although PuSA had a multi-level hierarchy (a single HQ and twelve distributed subsidiaries) with decentralised decision-making ('fiefdom' discourse), there was move towards increased centralised decision-making ('one network' discourse). PuSA's culture was a competitive one where individual performance outputs and impacts predominated (a 'fiefdom' discourse). From 2000 a role culture, however, was emerging with increased mechanistic coordination of PuSA systems, processes, policies and procedures ('one network' discourse). These changes meant that between 2000 and 2008 PuSA exhibited a high degree of centralisation and formalisation typically associated with bureaucratic organisations (see Rogers, 2003 p. 412; Swan et al, 2009 p. 36).

These four discourses (pan-organisational 'fiefdom' and 'one network' discourses and corresponding subsidiary 'local delivery' and 'network delivery' discourses) are drawn on in subsequent analysis in Chapter 4 and 5 to explore whether Knowledge Working matched (was compatible with) the overall agenda for 'one network' change. These discourses are also used to explore problems in the implementation phase of Knowledge Working in Chapter 5. First, however, it is necessary to consider the agenda for Knowledge Working in PuSA.

4.3.2.2 Setting the agenda for Knowledge Working in PuSA (2002-2003)

In PuSA Knowledge Working intended to further organisational goals of 'one network' working. The agenda for Knowledge Working can be seen in a KW strategy document approved in October 2002 (#92). In this document there are two drivers for Knowledge Working:

1. 'Establishing a "One Network" approach to our work. This involves the creation of Shared Services, and, where appropriate, the introduction of network-wide infrastructures and practices in place of a multitude of self-contained, but uncoordinated, structures and practices'. The aim here is 'to further organisational goals' (Birkinshaw et al, 2008) through culture change;
2. 'Extending our "Reach and Impact" into, and on, the economy. This involves introducing new channels for working with our customers, as well as clarifying what we offer them and how we deliver it.' The aim here is 'to enhance firm performance' (Mol & Birkinshaw, 2009), the outputs of which were to be accounted for through PuSA's mechanistic coordination of standard performance measures.

Intranet pages (#80) shows that this second 'reach and impact' driver was based on work BT KW Knowledge Workstream undertook between 2000 and 2002 (for example, developing products and internet content) and not work the KW Team would be doing from 2003 (for example, implementing KW tools). The analysis therefore focuses on 'one network' working. Despite this confusion in the aim of Knowledge Working, it meets a characteristic of management innovation to further organisational goals (see Birkinshaw et al, 2008).

The BT Programme 2 agenda for 'one network' change in PuSA was a 'facilitating factor [that] motivated [HQ senior management to adopt] a new management innovation' (Birkinshaw, Hamel & Mol, 2008 p. 833). The need to 'manage our knowledge' was a key theme in a PuSA 2002 'one network' presentation because 'as a network we need to get better at sharing and using our knowledge' (#92). Knowledge Working also appeared in a 2003 'big picture story' a document that 'shows how we're all working together as one network' (#124). In this document, Knowledge Working was described as a 'change project' (#124). This illustrates that not only was Knowledge Working a product of organisational change, but also a change project to facilitate organisational change in PuSA. Knowledge Working was initiated to facilitate 'one network' working, thereby alleviating the 'fiefdom syndrome' (Herbold, 2005) where independent working, resource hoarding, and diversity in subsidiary operations was the norm.

4.3.3 The knowledge/ research episode (1999-2001)

In PuSA the agenda-setting episode and knowledge/research episode was recursive. It was the broad agenda for organisational change in K-Web Programme 1 and BT Programme 2 that motivated HQ Senior Management to: (1) undertake internal opportunity-driven research to identify broad (labelled 'high-level' in PuSA) organisational 'needs/problems' (Rogers, 2003) to address; and (2) external problem-driven or opportunity-driven research to seek 'inspiration' (Birkinshaw & Mol, 2006) for new ideas to: (a) address broad problems already identified; or (b) identify further opportunities for change.

In the early stages of the K-Web Programme 1 and BT Programme 2 research was undertaken to identify 'opportunities' (as they were called in PuSA) between 1999 and 2002 to change the organisation. This section here will consider both internal and external research to identify opportunities to change PuSA into a 'knowledge-based e-business' (#42).

4.3.3.1 Seeking inspiration from internal sources to change PuSA (1999-2002)

In K-Web Programme 1 PA Consulting Group (a management consultancy firm) was commissioned in 1999 to work with three members of PuSA staff to identify internal 'opportunities' for change (#384). A BT evaluation document (2005) shows that this group's remit in 1999 was to undertake 'a high-level review of [PuSA] to understand its structure, current approach and the opportunities that existed to [change] the organisation' (#384). As part of this review, research was undertaken to: (1) map business processes; (2) identify 'customer linkages'; and (3) gain selected staff views on areas for change (#42, #384). In total, seventy interviews and six workshops with a selection of PuSA staff and senior managers were held to gain their views (#42, #384). The outcome of this research was the identification of 120 opportunities for organisational change (#384). A presentation on the opportunities for change that were emerging in 1999 highlights that: 'one network' working; knowledge sharing; performance management; and shared services for 'back-office' (as labelled in PuSA) staff were key considerations (#31).

A K-Web presentation (circa 1999) (#32) shows that twelve 'opportunities' for Knowledge Management were identified:

- 'Turbo dashboard: monitoring real-time operational performance';
- 'Goalscorer: modified performance management system';
- 'K-Plan: knowledge-based strategy';
- 'See-K!: accessing all our knowledge';
- 'Special K-People: with specialist knowledge skills';
- 'K-pability: basic levels of knowledge management and communication skills';
- 'K-Mart: an open market in research and evaluation activities';
- 'K-Laboration: combined spend and effort in research';
- 'K-Guide: guidance on developing knowledge';
- 'K-Wide: open systems to co-create strategy with others';
- 'K-Direct: best practice directory';
- 'The K-files: summary encyclopaedia of knowledge'.

The search for opportunities to change the organisation continued during BT Programme 2. In March 2000 another management consultancy firm Cap Gemini Ernst and Young (CGEY) was recruited (#384). Twenty-three management consultants, together with 'ten workstreams' (comprising a cross-section of 150 staff across the organisation) were tasked to review and evaluate the 120 K-Web opportunities identified during 1999 (#34). Together with HQ Senior Management, the workstreams agreed to focus on: external areas (customer relations; services to business; services to people; competitive places; and international services); and internal areas (knowledge; human resources; supply chain; finance, legal and administration; and information communication technology) (#34). These BT Workstreams undertook a further 'detailed [internal] assessment of the organisation [that included] an analysis of business processes' (#384).

The search for opportunities to transform the organisation did not end here. BT Programme 2, as described by CEO 2, was a more ambitious programme of change (#42). The search was therefore extended to external organisations. This will be considered next.

4.3.3.2 Seeking inspiration from external sources to change PuSA (2000-2001)

In PuSA the search for inspiration for new ideas was sought through 'leading practice reviews' of external sources in June 2000 (#50). It was through these reviews that 'idea linking' with cultural and industry networks occurred (Birkinshaw et al, 2008 p. 835). A project document shows that the objectives of this review was to: (1) 'identify organisations which display leading practice in relevant [areas of focus]; (2) 'identify opportunities for change based on their experience'; (3) 'identify the likely benefits and costs associated with these changes'; (4) 'compare [PuSA] against these organisations in terms of these [areas of focus]'; and (5) 'identify the drivers of changes and potential obstacles' to their implementation (#50). In PuSA 'leading practice reviews' were

conducted to 'spark ideas' and not simply to identify practices that could be 'automatically adopted' (#51). The reason for this was that 'some [practices] are not relevant and some [PuSA could] do differently and better' (#51). A visioning document shows that these ideas had to represent 'radical change [and not merely] incremental improvements' (#45). These ideas, thus, had to be innovative.

The external search for new ideas in PuSA was mediated by 'selective exposure' (Rogers, 2003 p. 171). In an organisational setting, selective exposure can be defined as the tendency for an innovation network to expose themselves to ideas that relate to their own role and/or the organisation's remit. In PuSA, leading practice documents show that the initial search for new ideas was confined to the work the KM Directorate undertook (#50). The continuing search for new ideas broadened when the BT Knowledge Workstream was exposed to new ideas from external organisations that could be applied on a pan-organisational basis (#50). Rogers (2003 p. 171) also highlights that 'individuals seldom expose themselves to messages about an innovation unless they first feel the need for an innovation'. In PuSA the external search for Knowledge Management ideas in 2000 was influenced by the need to break down 'fiefdom' behaviours such as lack of knowledge sharing previously identified in 1999 (#29).

A leading practice document (2000) (#50) illustrates that the 'areas for focus' for leading practice reviews in Knowledge Management included:

- 'Dashboard and performance management';
- 'Knowledge-driven and open strategy development';
- 'Knowledge skills and knowledge specialists';
- 'Open and collaborative research / evaluation / futures work';
- 'Sharing experience and leading practice';
- 'PuSA-wide knowledge base'.

These 'areas for focus' were a synthesis of the twelve Knowledge Management 'opportunities' identified earlier during K-Web in 1999 (see section 4.3.3.1 on page 155).

The inspiration for new Knowledge Management ideas in each of these 'areas for focus' was primarily sought from 'the corporate sector, which has tended to invest heavily in business process re-engineering and knowledge management in recent years' (#50). This research primarily '[drew] on material provided by the CGEY [consultants], and was augmented with other case study material judged to be relevant to PuSA's situation and role' (#50). The content of various leading practice documents reveals that the CGEY material (or findings) was drawn from company and other web sites, articles and case studies in the public domain. It was also reported that 'efforts were also made to complement the existing leading practice material with additional case studies from the public sector, academia, and the professions' (#50).

A CGEY presentation on Knowledge Management solutions include:

- Information technology 'portals [with] customised self-service';
- 'Learning [that is] fast, sustained self-catered and delivered';
- 'Changing behaviours [to] make it happen';
- 'Communities [to] harness the power of many';
- 'Market place [that] profits from sharing';
- 'Focused content [that provides a] reliable answer, right here, right now';
- 'Support centres, [the] glue that makes it easy and effective for the customer';
- A 'workplace [that is] conducive, flexible and effective';
- 'Information capture [that is] complete, authoritative, and reliable';
- 'Information retrieval [that provides] quality not quantity right now';
- A 'dashboard [presenting] knowledge of where you are and where you're going' (#58).

A key lesson drawn from this leading practice research was 'that [Knowledge Management] isn't just about technology; behaviours are critical'. It was reported that many successful firms are using 'communities of practice' as effective ways of sharing knowledge' (#50). This lesson was a key motivation for introducing CoPs in PuSA.

CGEY consultants 'leading practice' reviews highlight two formal organisational structures ('shared service centres' and 'internal consultancy') (#59) that provided inspiration for the later HQ Senior Management approval of 'shared services' and a 'KW task force' in May 2002. This is explored further in section 4.3.4.3 on page 154. The shared service structures were defined as 'providing a range of services for multiple/disperate business units and locations from an in-house service organisation' (#59). CGEY stated that 'an internal consultancy has "no standard definition [...], however some typical activities might include the following: (1) offers support and advice, but not resources; (2) provides training and develops tools; (3) develops processes and techniques, and (4) serves as an "agent" for networks, providing relevant contacts in other networks and disseminating best practice' (#59). These recommendations are supported by later findings in a British Standards Industry (2005) report.

Additional "voice of the customer" research, undertaken alongside the 'leading practice reviews' in June 2000, was introduced to identify PuSA staff knowledge-related needs (#49). The first phase of this research 'was to determine whether the provision of Knowledge-related services 'was important for people to work effectively within [PuSA]' (#49). A quantitative web-based questionnaire was sent to all PuSA staff. An average of 92% of PuSA staff respondents (approximately a third of PuSA staff) agreed that it was important to have: good project management information; good economic and evaluation information; good planning and reporting systems; knowledge on best and leading practice; well-developed skills in knowledge sharing; and a corporate intranet for sharing knowledge and information.

The second phase of this research included holding three focus groups in August 2002 to explore the results of the questionnaire. These focus groups, consisting of ten individuals from different hierarchical and geographical levels of the business, did not target the 'usual suspects' (those members of staff that would be supportive of proposals). The outcome of this research was that 'staff agreed that effective knowledge creation and sharing is vital for us to do our jobs well. However, most agreed [an average of 19% agreed] that we don't yet have the systems to make it work for us... or the culture' (#49). The BT

Knowledge Workstream suggested that 'Special-K People [or] Knowledge Management experts should be able to assist [PuSA] staff acquire and store knowledge' (#49). The focus group report highlights that participants raised 'no opposition [...] to this suggestion' (#49).

This knowledge/research episode helped identify opportunities for organisation change between 2000 and 2001. These opportunities were either adopted, rejected or modified during the matching episode.

4.3.4 Matching episode (1999-2003)

In PuSA the matching episode involved: (1) selecting initiatives (including KM tools) to match the agenda for 'one network' change; and (2) planning and approving an infrastructure to support the implementation of these KM tools (later relabelled 'Knowledge Working').

4.3.4.1 Selecting BT Programme 2 initiatives to match the agenda for one network organisational change (2000-2002)

An outcome of this matching episode was either the adoption or rejection of 'opportunities' for change identified during the knowledge/research episode. In PuSA the outputs of this matching episode was an initial and final 'blueprint' for organisational change. The BT Change Board (including HQ Senior Management) approved an initial BT 'blueprint' for organisational change in December 2000 (#65). PuSA's HQ Board approved the final BT 'blueprint' for organisational change in November 2001 (#75). The analysis that follows explores the events that led up to the approval of these two blueprints for organisational change between 2000 and 2002.

The analysis focuses on the selection and planning of all BT Programme 2 initiatives included in the blueprints for organisational change. This provides an insight into: (1) decisions on adoption/rejection; and (2) work involved in planning for implementation. In this matching episode the 120 K-Web 'opportunities' (#26) identified in the knowledge/research episode 'were further explored further, challenged and planned in increasing detail' (#42). A BT Programme 2 presentation shows that HQ Senior Management held three 'challenge panel' sessions in 2000. It was during these sessions that 'some [opportunities] were abandoned [and] others were adapted or merged together' (#42). The 'primary goal' of the third HQ Senior Management challenge session was 'to [select] and sanction opportunities for implementation' (#55). The outcome of the third challenge session was the selection of forty-four change initiatives that formed the initial BT blueprint for organisational change in PuSA in December 2000 (#65).

Following the selection of forty four change initiatives that form part of the initial blueprint for change 'each [one] was planned out in exceptional detail, with a full strategic rationale, full costing and investment appraisal, and concrete plans for implementation' (#42). The planning process included 'build[ing] detailed business cases' (#55). These business cases defined: what PuSA was going to do; why PuSA was doing it; how PuSA was going to do it; and what the prospective implementation cost was likely to be (#57). Apart from building the business case for each initiative, planning also included producing 'project initiation materials' and a plan that 'prioritised opportunities' (#55). This culminated in an initial 'blueprint document [approved in December 2000] that set out what would be transformed and how transformation would take place' (#384). Following this reduction the financial forecast and benefits of each of these projects was reassessed to provide justification for their implementation.

An evaluation of the BT Programme 2 highlights that matching did not end here. The initial forty-four initiatives approved for implementation in July 2001 were reduced to twenty-three projects in November 2001 (#384). The appointment of another management consultancy firm Deloitte and Touche in July 2001 resulted in 'an unscheduled period of re-consideration and re-design of [BT Programme 2] between July 2001 and November 2001' (#384). This redesign took place because 'there was less clarity [amongst HQ senior managers regarding] the best way forward for the organisation' (#384). In particular, there was requirement 'to clarify the scale and scope of what was achievable' within the limits of financial and human resources available (#384). Those projects rejected were 'deemed no longer relevant or strategically important enough to merit inclusion' (#384). The outcome of this review was the selection of twenty three initiatives that formed a final blueprint for BT Programme 2 approved in November 2001 (#75).

4.3.4.2 Selecting Knowledge Management initiatives to match the agenda for organisational change (2000-2003)

The analysis now turns to the selection of KM (later relabelled 'Knowledge Working) initiatives that appeared in the BT Programme 2 initial blueprint (December 2000) and final blueprint (November 2001) for organisational change. A KM summary document (#46) shows that, of the forty-four projects approved in the initial blueprint for BT Programme 2 in December 2000, two were KM projects:

- '*Develop knowledge capability*: this project aims to put in place a network-wide [pan-organisational] common knowledge system (including a common knowledge repository) and promote appropriate knowledge skills and behaviours (including the encouragement of virtual communities)';
- '*Develop knowledge communities*: this project aims are to establish some "knowledge communities", or "knowledge networks", comprising "knowledge" experts within [PuSA]; [PuSA] operational staff; and staff from key partner organisations'.

The description of these KM projects shows that they matched the agenda for 'one network' working across PuSA. These projects, however, were revised when Deloitte and Touche (a management consultancy firm) were appointed in July 2001. Three KM 'tools' (re-labelled 'Knowledge Working') were selected for implementation in July 2001: (1) communities of practice (labelled 'CoPs' in PuSA); (2) a community-inspired intranet; and (3) knowledge packs (labelled 'k-packs' in PuSA) (#70, #74). These three KW tools formed part of the BT Programme 2 final blueprint for organisational change approved in November 2001 (#75). Although never stated in these terms, the strategy for Knowledge Working was a 'personalisation strategy' (Hanssen et al, 1999). A page on the intranet (circa 2001) states that 'with 80% of [PuSA's] knowledge located exclusively in the heads of staff, this is very much a "people" project supported by technology tools' (#80). CoPs comprised the 'people' element of this project, and an intranet and k-packs the 'technology' element. These 'malleable' (Mamman, 2002; 2009) KW tools were designed to be implemented across PuSA to address problems associated with 'fiefdom' working.

Various reasons were given for the selection of these KW tools. A BT Programme 2 evaluation document (2005) indicates these three tools (CoPs, intranet and k-packs) were selected because they were perceived to be 'strategically important' (#384). An earlier BT newsletter diffused to all PuSA staff in May 2002 suggests that these tools were strategically important because they would ostensibly 'help staff work together more effectively, increase consistency, and maximise collaboration and sharing' across PuSA (#84). Other texts suggests these tools were selected because they could be adapted to suit organisational circumstances. For example, other documents reported that: (1) CoPs were designed to meet 'the needs of both stakeholders and practitioners' (#132); (2) the intranet was designed around CoPs 'based on the themes and activities undertaken by [PuSA] in economic development' (#262); and (3) K-packs were 'designed to meet the specific needs of [CoPs]' (#79).

A CoP document drafted in 2005 describes the rationale for developing CoPs in PuSA (#356). Historically, a number of informal PuSA groups consisting of HQ and subsidiary employees met in an ad-hoc manner to share knowledge about their work. In 2000 a member of the HQ Senior Management Team issued a directive to disband informal groups as the value of their meetings could not be determined. During BT HQ Senior Management agreed that a more formal community development approach be developed to share knowledge across organisational boundaries. To validate their existence, each CoP had to write an operating plan. This had to include the community's vision, value, member and organisational benefits. The operating plan also had to set out who the members and stakeholders of the CoP were, and how the CoP aimed to communicate with PuSA staff. Each CoP had to appoint a sponsor who was a member of the HQ Senior Management Team. The CoPs operating plan had to be agreed and signed off by the sponsor, who had the structural authority to disband a CoP if it was 'not adding value to the organisation' (#356).

Matching continued in May 2002. A BT Programme 2 newsletter diffused to all PuSA staff in May 2002 highlights that three diagnostic tools (business needs analysis; social capital analysis, and social network analysis) were also selected to help develop CoPs (#84). These 'diagnostic' tools (as labelled in PuSA) had different functions:

- *Business needs analysis* assesses how a community defines itself, how it uses its knowledge and how it organises itself. The results give an overall picture of how the community is operating and where it can be supported to enable it to operate more effectively;
- *Social capital analysis* explores the culture of the community and knowledge sharing amongst individuals. The results can help a community to understand the levels of trust that exist between individuals and help identify knowledge sharing barriers to address;
- *Social network analysis* facilitates the mapping and measuring of relationships between community members and information sources. The results help a community to understand how well the members are interacting and whether they have access to information (#84).

The BT Knowledge Workstream anticipated that ‘in the course of working with the community, lead facilitators [would] gather information from the diagnostic tools’ to help identify CoP needs/problems to address (#131). This illustrates that further agenda-setting would take place before implementation could commence.

4.3.4.3 Selecting an infrastructure for Knowledge Working to match the agenda for organisational change (2001-2003)

The KW tools (CoPs, intranet and k-packs) matched the agenda for ‘one network’ change in PuSA. There was a mismatch, however, in the infrastructure chosen to support the implementation of these three KW tools. This is explored further using the discourses (fiefdom; one network; local delivery and network delivery) identified earlier in Table 3–1 on page 85. The analysis thus considers whether ‘planning entail[ed] anticipating the benefits, and the problems, that the innovation will encounter when implemented’ (Rogers, 2003 p. 423).

In PuSA the infrastructure selected to implement the KW tools (CoPs, intranet and k-packs) included: (1) a KW task force approved between May 2002 and October 2002 (#92); and (2) a ‘future-state operating model’ (as labelled in PuSA) or formal organisational structure approved in May 2002 (#82).

4.3.4.3.1 KW infrastructure decision (1): The approval of a task force to implement Knowledge Working (2002-2003)

HQ Senior Management approved two KW task force roles: (1) Knowledge Analysts in May 2002 (#82); and (2) Knowledge Specialists in October 2002 (#92). The KW task force roles approved in 2002 included:

- 'A Knowledge Analyst to better understand business needs, to roll-out and support new technologies and processes, and to support effective Knowledge Working in their local subsidiary' (#92);
- 'A KW team [labelled 'KW Team' in PuSA] of knowledge specialists to support the Knowledge Analysts and maintain [PuSA] systems and processes; and lead in the delivery, and ongoing development, of the strategy' (#92).

Together, the distributed Knowledge Analysts and centralised KW Team formed a KW task force (and KW CoP) to implement Knowledge Working in PuSA.

A BT Programme 2 evaluation document (2005) shows that the BT Change Board did not consider introducing a KW Team as part of the resource-planning exercise in early May 2002 (#384). Nevertheless, the retrospective approval of a KW Team was not an issue as staff members in the BT Knowledge Workstream were subsequently recruited into the KW Team. Both the BT Knowledge Workstream and its successor the KW Team were responsible for implementing KW tools (CoPs, intranet and k-packs) till they were 'integrated within the organisation as part of normal operations' (#133). This retrospective decision ensured continuity between the initiation phase and the implementation phase of the process of adoption of Knowledge Working in PuSA.

A KA job description was approved as part of an operating model in May 2002 (#82). Table 4–4 provides a summary of Knowledge Working tasks under headings that appeared in a 2003 version of the KA job description document (the original document was not available).

Table 4–4: The Knowledge Analyst job description

	Groups of KW tasks	KA role
A	BUSINESS/USER NEEDS ANALYSIS AND PROCESS DEVELOPMENT	
1	Lead the business and user needs analysis for Knowledge Working in the subsidiaries.	Business analysis
2	Lead efforts to develop and implement PuSA KW initiatives within the subsidiary.	Project management; Operationalisation
3	Assist in the localisation of PUSA KW initiatives within PuSA parameters.	Project management; Operationalisation
B	EDUCATION/REPORTING AND PROMOTION	
1	Ensure the KW agenda is supported by subsidiary senior management.	Influencing
2	Undertake subsidiary [staff] communication and stakeholder management.	Promotion; Project management
3	Provide subsidiary senior management with summaries of performance.	Monitoring
4	Recommend KW priorities [to senior management] for subsidiary action.	Business analysis
5	Promote subsidiary requirements at PuSA level.	Promotion
6	Monitor the usage and [staff] satisfaction levels of KW solutions and promote successes.	Monitoring; Promotion
7	Identify issues and barriers and develop proposals for their resolution.	Project management
8	Deliver training in KW solutions to subsidiary staff.	Training
C	SUBSIDIARY LOCAL SUPPORT	
1	Ensure adequate support is in place in the subsidiary and from PuSA resources [to support implementation].	Support; Project management
2	Provide expert support to subsidiary staff in their use of KW solutions.	Training; Support
3	Undertake structured, and informal, evaluation of KW initiatives.	Monitoring

Source: KA job description, 2003 (#83)

The types of roles the Knowledge Analysts were expected to fulfil thus included:

- business analysis (A1; B4);
- project management (A2; A3; B2; B7; C1);
- influencing (B1);
- promotions (B2; B5; B6);
- monitoring (B3; B6; C3);
- training (B8; C2);
- support (C2).

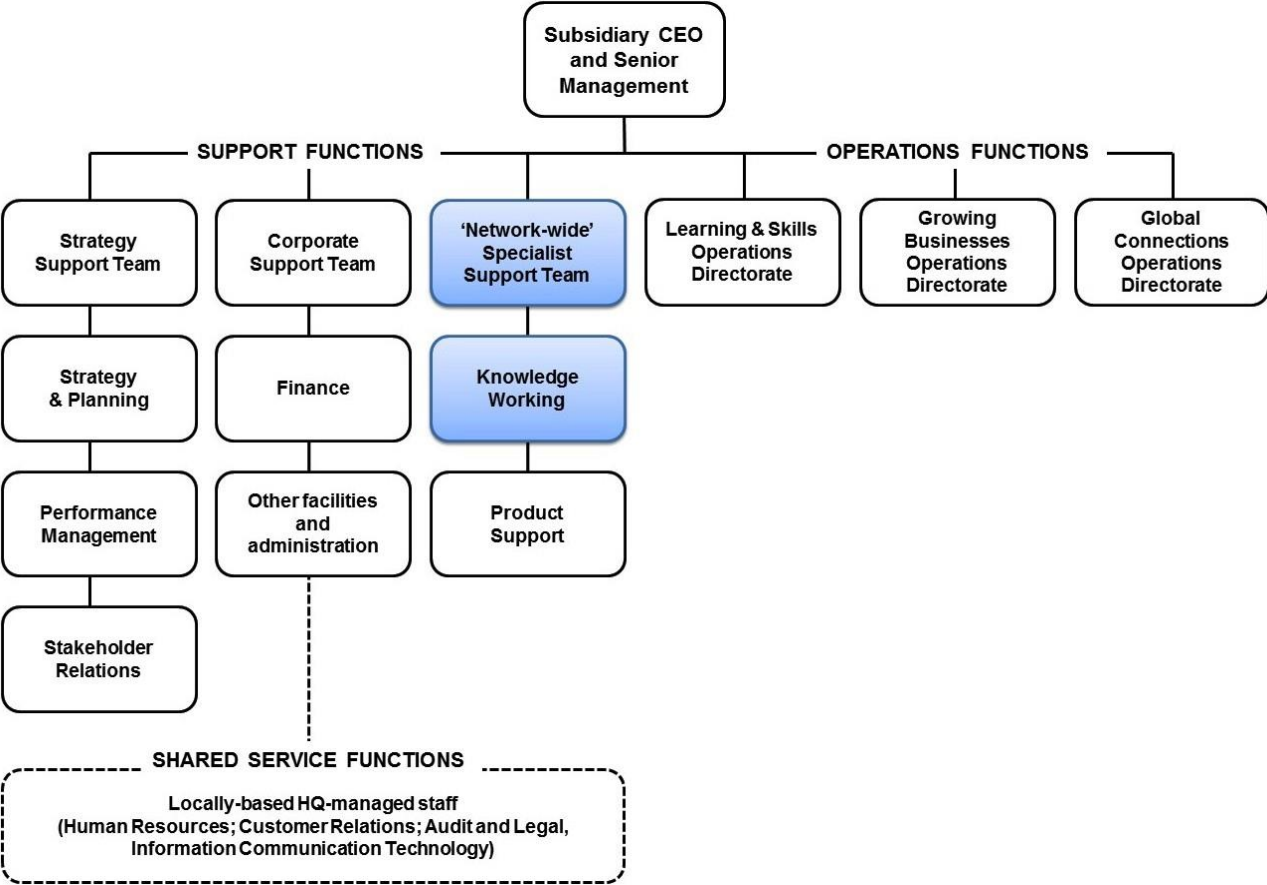
The analysis above shows that Knowledge Analysts were expected to undertake certain tasks (for example, business analysis, project management; promotions, and monitoring) typically reserved for a central KM team (#59). An analysis of the contents of the KA job description shows that, in PuSA, the KW Team were meant to adopt an informal 'supportive' role. They were merely expected to assist the Knowledge Analysts, rather than take a lead in promoting, influencing and project managing the implementation of a HQ-driven 'one network' management innovation. These KW task force roles contradicted CGEY leading practice findings of the roles of Knowledge Management staff: (1) a central KM team typically offers support and advice to develop Knowledge Management solutions, but not resource to maintain them; and (2) distributed KM members of staff situated in different locations are responsible for maintaining but not implementing KM solutions (#59).

The tasks in the 2003 KA job description illustrates that Knowledge Analysts were now meant to support both 'one network' working across PuSA and 'local delivery' within subsidiaries. Consequently, it was not clear whether Knowledge Working was predominantly centralised (pushing centrally-adopted solutions out to distributed locations) or decentralised (either pulling centrally-adopted solutions for localised use or developing localised solutions for use). This confusion in centralisation versus decentralisation broadened the scope of Knowledge Working and increased the 'complexity' (Rogers, 2003) in operationalising it in the implementation phase.

4.3.4.3.2 KW infrastructure decision (2): Approval of a subsidiary operating model (or formal organisational structure) for Knowledge Working in May 2002

A formal organisational structure for PuSA subsidiaries was approved for implementation in May 2002 (#82). See Figure 4–1. PuSA’s new subsidiary ‘operating model’ was inspired by, and reflected ‘a strategy set by the Scottish Executive [for PuSA, which required HQ Senior Management] to focus activities on a clearer set of priorities’ (#82). These strategic priorities were reflected in the new Directorates labelled ‘Learning & Skills’, ‘Growing Businesses’, and ‘Global Connections’. This operating model was also introduced because, as was stated in the operating model presentation, ‘the ‘Scottish Executive is also encouraging us to focus on efficiency and effectiveness [...] working within more explicit limits on our budget and headcount’ (#82). To promote efficiency shared service functions replaced ‘back-office’ (as labelled in PuSA) support functions that were previously replicated across PuSA. During the implementation phase the Knowledge Analysts questioned why they were not structured as a shared service to implement Knowledge Working *across* PuSA.

Figure 4–1: A generic subsidiary operating model (or formal organisational structure) approved for implementation in May 2002



Source: PuSA’s subsidiary operating model presentation (#82)

HQ Senior Management approved the introduction of Knowledge Analyst resources and KA job description as part of this operating model. A 2003 version of this document shows that Knowledge Analysts were expected to reside in a 'network-wide' specialist support team reporting directly to subsidiary senior management. This line management arrangement was important because the Knowledge Analysts, as stated in the KA job description, were expected to work closely with subsidiary senior management (see Figure 4–1 above). This decentralised operating model, however, contradicted CGEY management consultants' leading practice findings relating to formal KM operating models. They found that: (1) a centralised KM formal operating model is the favoured approach when a 'firm-wide view' and 'consistency' is sought; and (2) a decentralised KM formal operating model is chosen when the aim is to 'focus on specific business needs' and to ensure that 'Knowledge Management is embedded in the business' (#59). These CGEY findings illustrates that if malleable 'one network' KW tools such as CoPs, intranet, and K-packs were to be introduced consistently *across* PuSA then a centralised KW operating model was appropriate.

The formal subsidiary operating model was developed exclusively by HQ Senior Management. This illustrates that HQ Senior Management exercised their legitimate power to impose a Knowledge Analyst structure and role on its subsidiaries. In a presentation issued to Kirklea subsidiary in May 2000, it says that the operating model 'shows the functions and activities that [subsidiaries] will manage and operate' (#82). To 'suppress conflict' (Deetz, 2002), however, HQ Senior Management delegated authority to the subsidiaries to recruit and manage their respective Knowledge Analysts. This decision was a deliberate attempt at 'pacification' (Deetz, 2007). A field note shows that, at a meeting with the Knowledge Analysts in August 2004 the HQ KW CoP sponsor stated that the specialist structure was chosen because the subsidiaries did not want additional HQ shared services staff imposed on them (#313). This pacification decision would have 'unintended consequences' (Rogers, 2003) for the implementation of Knowledge Working PuSA. Problems discussed in the implementation phase in Chapter 5 can all be traced to this decision to create a disaggregated KW task force with distributed subsidiary line management.

To explore why this decision to introduce a decentralised KW task force operating model was inappropriate it is necessary to compare it with other formal 'back-office' (Knowledge Management and shared services) organisational structures. An analysis of how these 'back office' structures were managed and for what purposes, as well as job descriptions, reveals four primary characteristics:

- *Nature of work*: whether staff job-related knowledge was location-specific or domain-specific;
- *Mode of working*: whether staff worked within business functions or across them;
- *Mechanistic coordinating controls*: whether compliance with HQ systems, policies, processes and procedures was weak or strong;
- *Line management*: whether staff were centrally line managed by HQ or decentrally line managed by the subsidiaries.

The primary differences in the organisation of these structures are mapped in Table 4–5 below. This table shows that the specialist services characteristics were, with the exception of line management, the same as the shared services structure.

Table 4–5: Differences in subsidiary organisation

Formal Organisational Structure	Nature of work		Mode of working		Pan-organisational mechanistic coordinating controls		Line Management	
	Location-specific knowledge	Domain-specific knowledge	Within functions	Across functions	Weak	Strong	Headquarters (centralised)	Subsidiary (decentralised)
Hierarchical KM function	✓		✓			✓		✓
Shared services		✓		✓	✓		✓	
Specialist services		✓		✓	✓			✓

Mechanistic coordinating controls refer to pan-organisational systems, policies, processes, and procedures.

Source: original

The 'hierarchical' KM structure had strong pan-organisational 'one network' mechanistic coordinating controls: HQ set the overall PuSA strategy and developed consistent 'one network' processes and procedures for the strategic planning and monitoring of local economic development initiatives. Every year HQ allocated a portion of 'one network' funding to the subsidiaries to facilitate 'local delivery' economic development in distributed geographic locations. The subsidiaries had to account to HQ for their 'local delivery' expenditure and impacts. To ensure this was reported accurately subsidiary KM staff had to have location-specific knowledge of economic development programmes, projects and services. HQ Senior Management thus delegated line management to subsidiaries because: (1) there were strong 'one network' mechanistic coordinating controls; and (2) the location-specific nature of KM work was to support 'local delivery' in subsidiaries.

The 'shared services' structure was introduced to prevent the subsidiaries from returning to their 'fiefdom' ways of working. Historically, functions such as Human Resources and Information Communication Technology were originally wholly managed by each of the subsidiaries. Moreover, the subsidiaries developed their own 'local delivery' mechanistic coordinating controls. As a consequence, HQ mechanistic coordinating controls were weak. The nature of work these functions undertook was domain-specific rather than location-specific. PuSA's 'shared services' staff therefore did not require knowledge of their local geographical areas and could be deployed across organisational boundaries. The 'one network' nature of work meant that the mode of working was suited to the deployment of subsidiary staff across organisational boundaries. To ensure a 'network delivery' service was delivered service level agreements were drawn up between the shared services and subsidiaries. This analysis suggests that HQ Senior Management chose to line manage staff centrally due to: (1) weak 'one network' mechanistic coordinating controls; and (2) industry-specific knowledge requirements.

The subsidiary 'specialist services' structure was an inappropriate choice for operationalising the 'one network' KW tools (CoPs, intranet and k-packs). These KW tools required more than one Knowledge Analyst resource with domain-specific knowledge to help operationalise them. Knowledge Working, too, was a new management innovation. As a consequence, pan-organisational mechanistic coordinating controls was weak. Although Knowledge Working was meant to be built into business processes and performance frameworks (#173), the KW Team made little attempt to do this when Knowledge Working was implemented. The 'one network' nature of work, domain-specific knowledge requirements, and weak 'one network' mechanistic coordinating controls were similar to 'shared services' characteristics. HQ Senior Managers' decision to create a disaggregated KW task force with distributed line management suggests that they did not consider how they would implement the 'one network' KW tools (CoPs, intranet, and k-packs) selected during the matching episode.

The way in which this 'specialist services' structure was meant to be adopted was open to interpretation. In the presentation notes HQ Senior Management stated that this operating model was 'indicative', thereby highlighting diversity in the sense that 'each [subsidiary] is different and operates in different environments with different markets' (#82). HQ Senior Management expected diversity in application as 'there will be a slightly different application of this across [PuSA] according to business need' (#82). They also emphasised consistency when stating that 'the fundamentals in terms of tasks, responsibilities and operational focus will apply to all' (#82). The interpretive flexibility in these operating plan communications and emphasis on 'local delivery' in the KA job description allowed the subsidiaries to adopt operating models, and apply Knowledge Analyst resources, to suit 'local delivery' circumstances in the implementation phase of the adoption of Knowledge Working.

In the KA's job description (#83) there is no mention of sharing resources across subsidiary locations, and apart from PuSA-led mandatory initiatives, there is no mention of implementing Knowledge Working in a consistent manner. As a consequence, the 'network delivery' discourse in the operating plan was marginalised. The ability for the Knowledge Analysts to facilitate 'one network' working through a 'network delivery' method was dependant on 'commitment trust' in which the subsidiaries could 'be relied on to deliver' the nature of such work (Swan et al, 2005 p. 98). This type of trust is based on the underlying assumption 'that each party is expected to gain mutual benefit out of the relationship' (Swan et al, 2005 p. 98). However, in PuSA, this trust was already eroded prior to the introduction of Knowledge Analysts as not all subsidiaries believed in 'one network' working. This will be explored further in the persuasion episode.

4.3.5 The persuasion episode (2000-2002)

In the innovation literature persuasion is concerned with 'form[ing] a favourable or unfavourable attitude towards the innovation' (Rogers, 2003), or in PuSA's case, 'one network' pan-organisational change. In the analysis here persuasion also covers attempts to persuade PuSA staff of the efficacy of organisational change and Knowledge Working.

Despite a high economic and political 'tension for change' in PuSA (Greenhalgh et al, 2004 p. 608), some subsidiary staff thought that 'one network' working held little perceived 'relative advantage' (Rogers, 2003 p. 229) over existing 'fiefdom' ways of working. In a BT Programme 2 presentation (circa 2000) of PuSA's 'fiefdom' behaviours and desired 'one network' behaviours, it is reported that not all PuSA staff 'believed in the concept of 'one [PuSA] network' (#29). These changes: eroded subsidiary's staff power to make autonomous decisions; represented a loss of local innovation; and required subsidiary staff to achieve more with fewer resources. A BT Programme 2 evaluation document (2005) indicates that the transformation from 'fiefdom' working to 'one network' working 'created new cultural challenges for [PuSA], for example, a perceived

centralisation of many services and a 'power' shift in the organisation' to a more centralised operating model (#384).

Pages on PuSA's intranet (circa 2000) highlights HQ CEO 2's arguments to validate the introduction of BT Programme 2. An economic argument emphasised: 'massive upheavals' of traditional sectors; businesses being 'transformed' across the world; 'more and more' companies adopting e-business; e-business 'reshaping work, skills and the organisation', and technology having a 'revolutionary effect [...] on our lives' (#40). A competitive argument highlighted: an environment in which competitors were offering similar services; and the ability for its customers to compete in the global marketplace. A legitimation argument stressed the necessity for PuSA to maintain its 'credibility' as a provider of economic development services by introducing technology (#42). In the absence of appropriate technological innovations PuSA would be 'ignored by key customers, partners and stakeholders' (#42). In an attempt to convince PuSA staff of the requirement for change HQ Senior Management also argued that BT Programme 2 would result in positive changes within PuSA. These changes ranged from cultural change (performance management; customer orientation; joined-up working; technology step-change; and 'knowledge accumulation), to cost reduction and productivity gains (#41; # 42, #43). This illustrates that HQ CEO 2 considered organisational change an appropriate response to changes in the environment, and a means to achieve positive outcomes within PuSA.

The Scottish Executive (PuSA's principal stakeholder) did not exert any political pressure to adopt the breadth and depth of changes proposed during BT Programme 2. The Scottish Executive did, however, validate these changes by funding and promoting them. In the strategy for Scotland, the Scottish Executive described the BT Programme 2 project as 'operat[ing] consistently, coherently, and transparently across Scotland to achieve maximum value for money – operating as one network [...] acting in the best interests of Scotland, yet in a way which is sensitive to local needs and opportunities' (#61). This illustrates that the Scottish Executive's focus was not primarily on adopting e-business, but on achieving value for money epitomised in the term 'one network' in the quotation above.

During K-Web Programme 1 (1999-2000) and BT Programme 2 (200-2003) HQ Senior Management used various means to persuade staff of the perceived importance of organisational change in PuSA. For example, PuSA intranet sites 1 and 2 contained relevant information about both change programmes. During BT Programme 2: CEO 2 sent regular update emails to PuSA staff; newsletter updates were diffused to all PuSA staff (for example, #70, #84); and a PuSA 'one network' staff event was planned (#112). Persuasion was important, because as the BT Programme 2 evaluation (2005) reveals, organisational change 'was essentially a top-down process where the wider involvement and buy-in of staff was quite limited' (#384).

The key messages about 'one network' change were assimilated into a 'big picture story' presentation in March 2003 (#124):

'This picture shows how we're all working together as "one network", to enable us to deliver our vision – creating the conditions for [...] successful [economic development in] Scotland. Even though in [PuSA] we do many different things, and have different types of customers who have different needs, we are developing network-wide wide products, tools and processes that will enable us to work more consistently and efficiently' (#124).

In this 'big picture story' presentation Knowledge Working is presented as one of the 'change projects' to 'transform the organisation' (#124). This presentation was diffused to all PuSA staff, and helped set the scene for the adoption of Knowledge Working in PuSA.

4.3.6 Making the transition from the initiation to the implementation phase of Knowledge Working (2003)

Project plans were agreed and the projects were implemented (experimented with) by BT Programme 2 workstreams between November 2001 and July 2003. This July 2003 end date was the date HQ Senior Management handed completed BT Programme 2 projects over to PuSA staff to 'integrate within the organisation as part of normal operations' (#384). At the end of the BT Programme 2, in a May 2003 newsletter circulated to all PuSA staff, it was stated that the 'responsibility for ensuring that the new ways of working are embedded, and that the change momentum is maintained, now sits with the wider organisation' (#135). This transition between BT Programme 2-led and 'business as usual' PuSA-led initiatives was to be 'achieved through a project closure reporting process whereby the business unit received the completed work and took on responsibility' for embedding the projects into PuSA's operations (#384). This illustrates that there are no clear dates to mark the transition from the initiation to the implementation phase. For the analysis, transition was deemed to have taken place in October 2002 after a formal HQ Senior Management decision to approve the infrastructure for Knowledge Working.

4.4 Summary and conclusion

This chapter explored the first phase 'initiation' in the process of adoption of Knowledge Working in PuSA. Whilst there were many drivers for organisational change, the most significant was an external political mandate to modernise public services. The identification of four discourses in the analysis was representative of a move from one state (fiefdom and local delivery) to another (one network and network delivery). It is clear HQ's vision for Knowledge Working in 2002 was to facilitate 'one network' working. However, the Knowledge Working infrastructure selected did not meet the agenda for 'one network' change. The analysis highlights that conflict suppression through pacification played a key role in the decision to introduce a disaggregated KW task force with distributed line management.

HQ Senior Management pacified subsidiaries by introducing a disaggregated and distributed KW operating model, but did not consider the consequences of this decision. For example:

- The KW 'one network' tools (in particular, CoPs and k-packs) and diagnostic tools (business needs analysis; social capital analysis; and social network analysis) were not suitable for 'local delivery' in subsidiaries. These 'malleable' (Mamman, 2002; 2009) KW tools were designed to be implemented *across* PuSA and not within subsidiaries;
- All aspects of project management were duplicated (for example, KA training, KW promotions, evaluation of KW tools etc.) to allow for decentralised 'local delivery'. This was the antithesis of 'one network' working. Moreover, there were additional subsidiary stakeholders to manage and persuade to adopt KW (as opposed to focusing on just CoP stakeholders);

- The development and coordination of KW task force became more complex because: (1) KW staff competencies could not be developed to match task force skills gaps; (2) there was no KW task force slack to deploy staff where needed to implement KW tools; (3) KW Team performance was reliant on the ability of subsidiary managed KAs (a lone voice) to deliver both centralised 'one network' working and decentralised 'local delivery'.

These problems, and lack of subsidiary persuasion for 'one network' change resulted in unanticipated and unintended consequences. These will be explored further in Chapter 5.

5 Chapter 5: The implementation phase of Knowledge Working (2002-2006)

5.1 Introduction

Having explored the initiation phase of the adoption of Knowledge Working in PuSA in Chapter 4, this chapter moves on to an exploration of the implementation phase. The research framework in Chapter 3 (see Figure 3–7 on page 133) shows three episodes that would be anticipated in the implementation phase shown in Table 5–1.

Table 5–1: Anticipated episodes in the implementation phase of adoption of management innovation

Terms used as labels for episodes in the analysis.	Episodes that appear in the five processes of innovation in Chapter 2 that have similar content (see Figure 2–1 page 36).
Modification	Modification (Rogers, 2003)
Operationalisation	Implementation (Birkinshaw, Hamel & Mol, 2008; Rogers; 2003)
Clarification/ confirmation	Internal and external validation (Birkinshaw & Mol, 2006)
	Theorisation and labelling (Birkinshaw, Hamel & Mol, 2006)
	Confirmation (Rogers, 2003)
	Clarifying (Rogers, 2003)

Source: original

The analysis found that this was the case in PuSA. This chapter is, therefore, divided into three sections. The first section investigates the type of modifications (addition, omission, substitution and hybridisation) in the infrastructure selected for Knowledge Working (see section 4.3.4 on page 160 in Chapter 4). These modifications occurred due to planning and design decision-making in the initiation phase of the process of adoption of Knowledge Working in PuSA. The second and third sections investigate the problems that occurred in trying to operationalise and confirm/clarify Knowledge Working as a result of these modifications.

This 'story' of the implementation phase in which these three episodes are acted out follows a chronology, where possible, of the adoption of Knowledge Working at PuSA. It is worth noting that episodes overlap and activities within each episode may cover the entire period of the implementation phase between 2002 and 2006.

This chapter also contributes evidence that is relevant to addressing all of the study's research questions (RQs 1-9) as noted in Table 1-1 of Chapter 1. Material from this chapter (and Chapters 4 on the 'initiation' phase and Chapter 6 on the 'outcomes' of the adoption process) will be used in the discussion chapter (Chapter 7) with direct relevance to the new insight that the full study reveals on the process of adoption of a management innovation in an organisational setting.

5.2 The role of external and internal networks in the implementation phase of Knowledge Working (2002-2006)

In PuSA, members of the cultural network (an IBM consultant and KM guru's) and three internal networks (management, innovation, and practitioner networks) were found to play a direct role in the implementation phase of Knowledge Working between 2002 and 2006.

The internal networks include:

Management network:

- Headquarters (HQ) senior management staff who have the structural authority to make, veto, and enforce decisions at a pan-organisational level;
- Subsidiary senior management staff who are delegated authority to make, veto and enforce decisions on a subsidiary level;
- A headquarters (HQ) Senior Management staff who sponsors the KW CoP;
- Subsidiary managers that line manage the Knowledge Analysts (KA line managers).

Innovation network:

- A member of the Design Authority (a team in BT Programme 2) who tried to clarify/confirm what Knowledge Working 'was'.

Practitioner network:

- A disaggregated KW task force comprising a central KW Team and Knowledge Analysts line managed by their respective subsidiaries.

The staff network comprising PuSA staff who are perceived to be knowledge workers, and thus customers of the KW task force are not within the scope of this analysis. Rather, the analysis here focuses on the KW task force (and in particular the Knowledge Analysts) struggle to implement Knowledge Working in PuSA.

Pseudonyms used in the analysis chapters are shown in Table 5–2 and Table 5–3.

Table 5–2: Knowledge Working team members and roles

Key members of the KW Team	KW Team members roles
Knowledge Working Director: (Mark)	<ul style="list-style-type: none"> • Overall responsibility for implementing Knowledge Working across PuSA. • Formerly responsible for leading the Knowledge Workstream during BT Programme 2.
Change Manager: (Isla)	<ul style="list-style-type: none"> • Recruited in August 2003 to: (1) develop KW communications, (2) manage KW stakeholders, and (3) provide strategic direction for, and development of, the KA role.
KA Coordinator: (Marlene)	<ul style="list-style-type: none"> • Responsible for coordinating Knowledge Analyst meetings, training and work activities in conjunction with Isla.

Source: PuSA internal documents

The Knowledge Analysts were responsible for implementing ‘one network’ KW tools across PuSA and supporting ‘local delivery’ of KW initiatives in their respective subsidiaries. There were a number of Knowledge Analyst staff changes during implementation. The numbers 1 to 14 refer to the subsidiary each Knowledge Analyst was located in, and the letters A, B, and C refer to the number of Knowledge Analysts that worked in each subsidiary between 2002 and 2008. The highlighted names in grey are those Knowledge Analysts who worked in different subsidiary locations. All these names are pseudonyms, apart from Louise (the author of this thesis).

Table 5–3: Subsidiary and Knowledge Analysts pseudonyms

Subsidiary and Headquarters	Knowledge Analysts (A, B, & C refer to staff changes)			
	A	B	C	
Ashcroft Subsidiary	Sarah			
Berwick Subsidiary	Jane			
Carnegie Subsidiary	Alison	Jessie		
Dunstane Subsidiary	Bonni	Tracy	Alana	
Glenview Subsidiary	Arthur			
Hopetoun Subsidiary	Louise	Gordon		
Kirklea Subsidiary	Kyle	Louise		
Mallard Subsidiary	Eva			
Newton Subsidiary	Gail			
Rosslea Subsidiary	Helen	Tracy	Kirsty	
Strathyre Subsidiary	Lorna			
Wallace Subsidiary	Niel			
PuSA Headquarters	Bonni	Shona		
PuSA Headquarters	Ross			

Source: internal PuSA documents

5.3 Episodes in the implementation phase of Knowledge Working in PuSA (2001 – 2003)

The 'story' that follows explores three episodes derived from coding in the chronological timeline in Appendix A. These three episodes do not follow a linear sequence but run in parallel (see Table 7–4 on page 298 in Chapter 7). Each episode will be considered in the sections that follow.

5.3.1 The modification episode (2002-2007)

A decision to introduce a disaggregated KW task-force with distributed line management in the initiation phase was the cause of modifications in this episode (2002-2007). Four modifications are investigated in this section:

1. Modifications between 2002 and 2007 to the 'specialist services' organisational structure approved in May 2002 in the initiation phase;
2. Modifications between 2002 and 2007 in criteria for the recruitment and selection of Knowledge Analysts as specified in the subsidiary operating model and KA job description approved in May 2002 in the initiation phase. Modifications considered here include:
 - a. Modifications in Knowledge Analyst recruitment timeframe;
 - b. Modifications in Knowledge Analyst contractual conditions;
 - c. Modifications in Knowledge Analyst competency;
3. Modification between 2002 and 2007 to the number of KW tools forming a KW toolkit: the first six were approved between July 2001 and November 2002 in the initiation phase;
4. Modification in 2003 to the 'one network' agenda-setting process (comprising business analysis, social capital analysis, and social network analysis KW tools) developed in May 2002.

The analysis explores whether the modifications took place through: (1) addition, omission, and substitution of components of the original idea, or (2) hybridisation: merging two distinct ideas together (see Mamman, 2002; 2009 in section 2.3.2.2 on page 45 in Chapter 2).

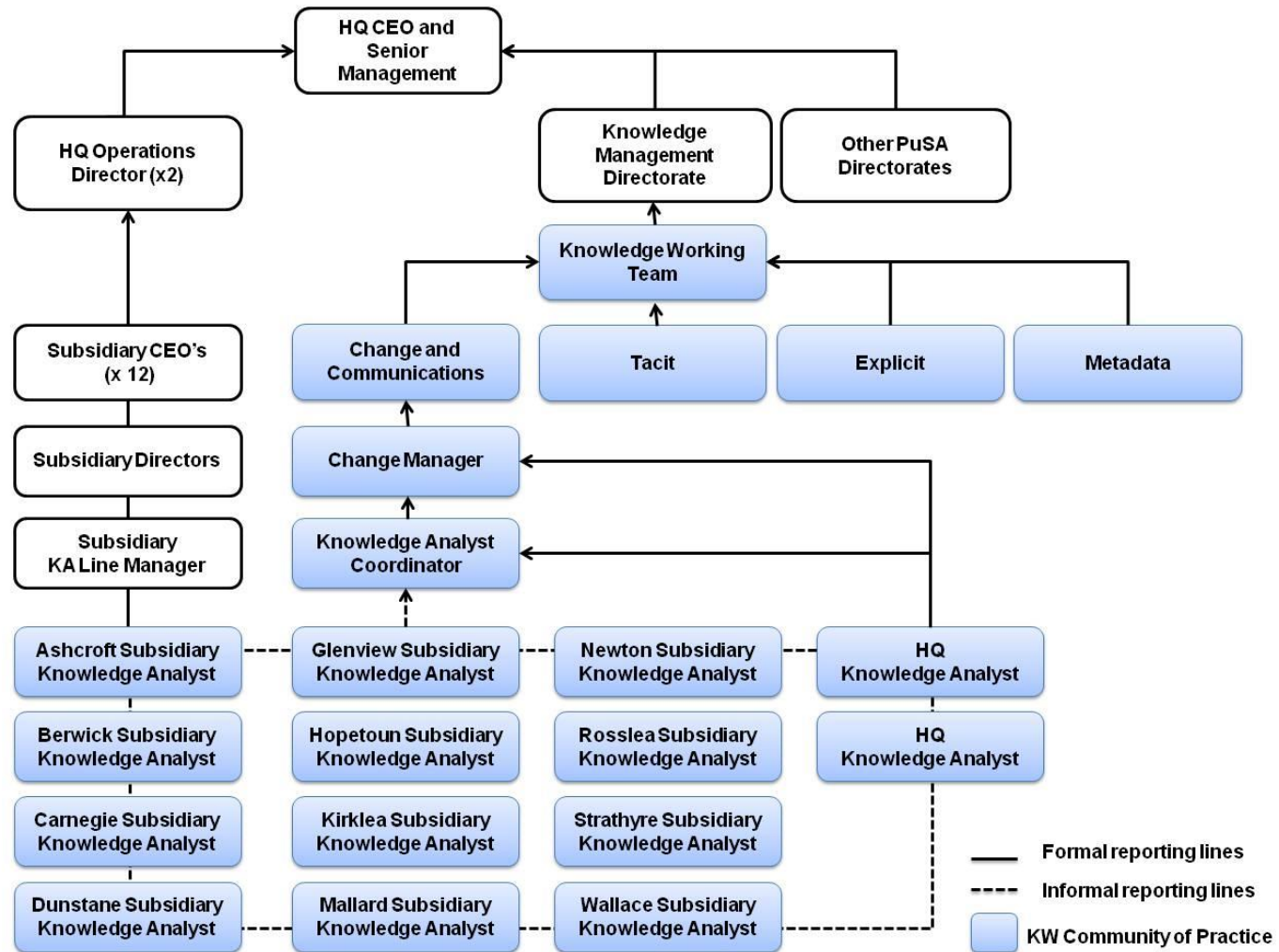
5.3.1.1 Decision (1) to modify the formal ‘specialist services’ organisational structure (2002-2007)

An analysis of email message signatures between the period 2003 and 2007 illustrates that subsidiary senior management omitted the specialist services structure shown in Figure 4–1 on page 170 in Chapter 4 from subsidiary operating models. The majority of subsidiary Knowledge Analysts were typically included in a KM Team responsible for KM functions of strategy, finance, research and evaluation. In choosing this formal organisational structure subsidiary senior management imitated formal KM organisational structures introduced during BT Programme 2. An analysis of BT Programme 2 project documents reveals that: (1) the BT Knowledge Workstream was sponsored by the KM Director (leader of the KM Directorate) between 2001 and 2003 (#93, #94); and (2) the KW Team was later incorporated into a HQ KM directorate in April 2003 (#119).

The omission of a formal ‘specialist services’ structure meant that the Knowledge Analysts did not report to subsidiary senior management as HQ originally intended in the initiation phase of the adoption of Knowledge Working. Rather, they reported to a KA line manager, who in turn, reported to a single member of the subsidiary senior management team. The Knowledge Analysts were thus perceived to be a ‘local delivery’ member of subsidiary KM Teams rather than a member of a ‘specialist services’ team working directly with subsidiary senior management to facilitate ‘one network’ working.

The line management arrangements of Knowledge Analyst are shown in Figure 5–1. This figure illustrates that there were two reporting lines; Knowledge Analysts were expected to formally report to their subsidiaries and informally to the KW Team. In isolation, the KW Team and Knowledge Analysts operated in their own separate geographical locations. Together, they formed a disaggregated KW task force with distributed line management. Additionally, they formed a KW CoP following a two-day workshop held in September 2003 (#157).

Figure 5–1: The Knowledge Working task force operating model



5.3.1.2 Decision (2) to modify the recruitment and selection of Knowledge Analysts (2002-2007)

HQ Senior Management expectations for the recruitment and selection of Knowledge Analysts can be seen in two documents approved in the initiation phase of Knowledge Working (2000-2003): subsidiary operating model (#82) and KA job description (#83). These two documents (#82, #83) illustrate that HQ Senior Management and the BT Knowledge Workstream expected the Knowledge Analysts to:

- be recruited by April 2003;
- be recruited on a full-time basis;
- undertake the KA role on a full-time basis;
- be recruited on a senior executive grade;
- be given the job title 'Knowledge Analyst';
- be recruited for specific 'Knowledge Management' competencies.

The analysis that follows shows how subsidiary senior management exercised their delegated authority and legitimate power, either purposely or inadvertently, to fill the Knowledge Analyst posts to meet their requirements. This resulted in modifications in: (a) recruitment timeframes; (b) recruitment processes; (c) contractual conditions; and (d) staff competencies. These modifications will be explored next.

5.3.1.2.1 Decision (2a) to modify Knowledge Analyst recruitment timeframes (2002-2007)

The chronological timeline in Appendix A reveals that six of the initial twelve subsidiary Knowledge Analysts (Sarah, Jane, Alison, Bonni, Arthur, Gail and Helen) (#105) were in post by November 2002. Recruitment, however, for the remaining six posts took over a year: three (Kyle; Lorna; and Ross) joined in April 2003 (#120); two (Louise and Niel) in July 2003 (#143); and the last (Eva) in January 2004 (#209). The recruitment of these last three Knowledge Analysts (Louise, Arthur L, and Eva) did not meet HQ expectations for an April 2003

recruitment deadline (see Table 5–4 for KA recruitment gaps). The analysis will now look specifically at the subsidiaries in which Louise worked as a Knowledge Analyst to account for these gaps in recruitment.

There was a total gap of eight months Knowledge Analyst service in Hopetoun and Kirklea subsidiaries. Initially, the CEO's in Hopetoun and Kirklea were not convinced that a KA role was required. A field note shows that, in a conversation with Louise in July 2003, a Human Resources staff member mentioned that Hopetoun's CEO finally capitulated and agreed to formally recruit a Knowledge Analyst on a part-time basis after receiving a number of emails from the KW Team requesting specific Knowledge Working tasks be undertaken (#143). At the job interview Louise was were told Hopetoun CEO had changed his mind, and would like to appoint a Knowledge Analyst on a full-time basis (#143). This demonstrates an initial lack of leadership support for Knowledge Working in Hopetoun subsidiary. In Kirklea notes accompanying a May 2002 subsidiary operating model presentation reveals that subsidiary senior management questioned whether a KA 'local delivery' role was required (#82). A field note of a conversation with Louise in July 2004 recounts that Kyle mentioned he was given the KA role in Kirklea subsidiary on his return from secondment to BT Programme 2 (#298). Here, subsidiary senior management adopted a wait and see approach to determine whether a 'local delivery' KA role was required in future.

There were further modifications in the recruitment of additional resources (#121, #166, #217; #333; #365). Knowledge Analysts were recruited in Carnegie, Dunstane, Hopetoun, Kirklea and Rosslea subsidiaries (shown as A, B, and C in Table 5–4). KA weekly dates, KA monthly meeting minutes, and field notes for the period 2002 and 2004 indicate that Knowledge Analyst staff turnover was due to:

- An initial selection of individuals who did not 'fit' the KA role (Bonni, Alison, Kyle and Helen). Bonni was recruited to work in PuSA HQ but left ten months later to take up another position at HQ. Kyle and Helen formally applied for, and were granted, other positions within their subsidiaries. A June 2004 field note shows that, in a conversation with Louise, Alison

admitted that she was unhappy in the KA role (#274). Consequently, Alison's KA duties were removed and she reverted back to her original subsidiary role;

- A lower salary grading than that specified in the 'generic' Knowledge Analyst job description (Bonni and Tracy). One of the reasons Bonni and Tracy applied for Knowledge Analyst roles in other subsidiaries was because these roles were on a higher salary grading;
- A lack of senior management support for Knowledge Working (Bonni, Tracy, Alison; and Louise). A June 2004 field note shows that, in a conversation with Louise, Alison admitted that Carnegie subsidiary did not believe in Knowledge Working (#274). In another June 2004 field note gathered when Louise left Hopetoun subsidiary, a director mentioned that the role 'must have been lonely and frustrating as no real direction was given' (#279);
- A lack of perceived career advancement in the KA role (Bonni, Tracy, Kyle). A field note shows that, in a telephone conversation with Louise in July 2004, Tracy mentioned that she decided to leave PuSA as the KA role 'was not going anywhere' and was 'not contributing to [her] CV' (#299). Another field note gathered at a KW CoP sponsor meeting in August 2004 indicates that the majority of Knowledge Analysts did not think the prospect of career progression in this KA role was very high (#313).

The lack of staff turnover in some subsidiaries, however, did not necessarily equate to job satisfaction. For example, in an email to Louise in April 2005 Gail said: 'It's probably terrible to say but am now at stage (and have been for some time now) where I'll be more than happy to walk away from this stuff, i.e. it can keep on withering as far as I'm concerned. Has been the worst 2 years of my career thus far' (#249). The dissatisfaction with the KA role as a whole was not more pronounced because 'if what the Knowledge Analysts did hit roughly on Knowledge Working everyone was happy' (#441). The KA's 'sometimes ["played the game" by] identifying KA activities post-hoc i.e. things were found to fit the role' (#441). This façade of progress thus helped prevent job dissatisfaction.

In all but three subsidiaries (Wallace, Newton and Mallard) an 'observable' (Rogers, 2003) KA role was maintained till December 2006. Wallace subsidiary senior management were not committed to maintaining a 'network delivery' KA role. Niel, who was located in Wallace subsidiary, was the only Knowledge Analyst on short-term contract. His contract was not renewed after it ended in March 2005. In an email to Louise in February 2005, Niel said: 'It appears my contact is ending 'cos I wasn't doing enough local stuff to justify [the] CEO's investment (let that be a lesson to you all!!!)' (#361). In this subsidiary, overall, there was a twenty-two month gap in Knowledge Analyst service (see Table 5–4). Eva and Gail, located in Mallard and Newton subsidiaries respectively, were allocated other work unrelated to the KA role. Their KA roles ceased in July 2006.

Three subsidiaries (Carnegie, Dunstane and Hopetoun) maintained an 'observable' (Rogers, 2003) but minimalist KA role till December 2006. A field note gathered at KA development workshop in June 2004 highlights that Jessie and Alana only found out they were allocated the KA role one day a week when they received a KA weekly update e-mail from either Isla or Marlene (#290). In a conversation with Louise at this workshop, Alana felt that the KA role was an 'add on' to her current job (#290). Jessie agreed that she would use the KW tools in relation to her own work to prove that Knowledge Working 'could work' before handing it on to someone else (#290). In October 2005, when Louise left Hopetoun subsidiary, the plan was to recruit a new 'Senior Research and Knowledge Executive' with a limited KA remit (#332). In an email to Hopetoun's CEO in September 2004, the KA line manager stated that: 'in seeking to replace Louise I am keen to ensure that her replacement post is specified as a full value post within the strategy team [...] which will cover elements of the Knowledge Working agenda' (#332). The new KA recruit, Gordon, was allocated few KA tasks. This illustrates that these subsidiaries (Carnegie, Dunstane and Hopetoun), as mentioned in a February 2007 after action review, were 'only paying lip service to [Knowledge Working with] no actual activity behind it' (#441).

Table 5–4: Dates the Knowledge Analysts were in post between 2002 and 2006

Subsidiaries	Knowledge Analysts (A, B, or C refers to number of KA's in post)		Dates in post (from)	Dates in post (to)	Total months in post	KA service gap after April 2003 deadline (in months)	KA service gap between recruiting KA's (in months)	Total KA service gap (in months)
Ashcroft	1	Sarah	Nov-02	Dec-06	49	0	0	0
Berwick	2	Jane	Nov-02	Dec-06	49	0	0	0
Carnegie	3A	Alison	Nov-02	May-04	28	0	n.a.	1
	3B	Jessie	Jun-04	Dec-06	5	n.a.	1	
Dunstane	4A	Bonni	Nov-02	Apr-03	4	0	n.a.	8
	4B	Tracy	Sep-03	Feb-04	5	n.a.	5	
	4C	Alana	May-04	Dec-06	28	n.a.	3	
Glenview	5	Arthur	Nov-02	Dec-06	49	0	0	0
Hopetoun	6A	Louise	Jul-03	Sep-04	14	2	n.a.	8
	6B	Gordon	Mar-05	Dec-06	22	n.a.	6	
Kirklea	7A	Kyle	Apr-03	Feb-04	10	0	n.a.	8
	7B	Louise	Oct-04	Dec-06	27	n.a.	8	
Mallard	8	Eva	Jan-04	Jul-06	31	9	0	9
Newton	9	Gail	Nov-02	Jul-06	44	0	0	0
Rosslea	10A	Helen	Nov-02	Feb-04	14	0	n.a.	0
	10B	Tracy	Feb-04	Jul-04	16	n.a.	0	
	10C	Kirsty	Apr-04	Dec-06	45	n.a.	0	

Strathyre	11	Lorna	Apr-03	Dec-06	45	0	n.a.	0
Wallace	12	Niel	Jul-03	Apr-05	22	2	21	23
PuSA HQ	14A	Bonni	Apr-03	Feb-04	10	0	n.a.	2
PuSA HQ	14B	Shona	Apr-04	Dec-06	33	n.a.	2	
PuSA HQ	13	Ross	Apr-03	Dec-06	45	0	0	0

Notes:

- Bonni moved from Dunstane to PuSA HQ;
- Tracy moved from Dunstane to Rosslea subsidiary;
- Louise moved from Hopetoun to Kirklea subsidiary.

5.3.1.2.2 Decision (2b) to modify Knowledge Analyst contractual conditions (2002-2007)

In the initiation phase the subsidiary operating model (2002) and KA job description document (2002) shows that the Knowledge Analysts were to:

- be recruited on a full-time basis;
- undertake the KA role on a full-time basis;
- be recruited on a senior executive grade;
- be given the job title 'Knowledge Analyst'.

Subsidiary senior management, however, modified the Knowledge Analysts contractual conditions between the period 2002 and 2007. An analysis of email signatures for the period 2003 and 2006 shows that: (1) three Knowledge Analysts were not on the same salary grading (Sarah, Bonni and Tracy); and (2) seven were not given the job title 'Knowledge Analyst' (Jane, Alison, Jessie, Alana, Gordon, Louise, Lorna). The Knowledge Analysts on a lower salary grading were not happy to be allocated the same KW tasks as those on a higher salary grading. As a consequence, Bonni and Tracy applied for KA roles in other locations (HQ and Rosslea) that advertised a higher salary grading (#121, #166). The lack of a KA job title minimised Knowledge Working 'observability' (Rogers, 2003) in Berwick, Carnegie, Dunstane, Hopetoun, Kirklea and Strathyre subsidiaries. The Knowledge Analysts in these subsidiaries either had: (1) other formal subsidiary roles; or (2) were allocated other 'local delivery' work.

The time allocated for Knowledge Analyst work caused considerable tension between the KW Team and subsidiaries between 2002 and 2008 (#355, #396). Table 5–5 on page 198 shows that only those Knowledge Analysts located in Ashcroft, Rosslea, and HQ were recruited to undertake the KA role on a full-time basis. Although Bonni, Tracy, Arthur, Kyle, Eva, Gail, and Lorna were recruited on a full-time basis, they were allocated other subsidiary work. In Alison, Jessie, Alana and Gordon’s case, the KA role comprised only a fraction of other work allocated to them. Niel later noted, when he left PuSA in 2005 that ‘other roles given to Knowledge Analysts often seem to be valued more locally’ (#257).

Table 5–5: Knowledge Analyst recruitment process and contractual conditions

Subsidiaries	Knowledge Analysts (A, B, or C refers to number of KA's in post)		Recruitment permanent or contract	Senior Executive Salary Grade	KA job title	Employed full or part-time	KA role in practice: full or part-time
Ashcroft	1	Sarah	permanent	no	yes	full-time	full-time
Berwick	2	Jane	permanent	yes	no	part-time	part-time *
Carnegie	3A	Alison	permanent	yes	no	full-time	part-time **
	3B	Jessie	permanent	yes	no	full-time	part-time **
Dunstane	4A	Bonni	permanent	no	yes	full-time	full-time*
	4B	Tracy	permanent	no	yes	full-time	full-time *
	4C	Alana	permanent	yes	no	full-time	part-time **
Glenview	5	Arthur	permanent	yes	yes	full-time	full-time *
Hopetoun	6A	Louise	permanent	yes	yes	part-time	full-time *
	6B	Gordon	permanent	yes	no	full-time	part-time **
Kirklea	7A	Kyle	permanent	yes	yes	full-time	full-time *
	7B	Louise	permanent	yes	no	part-time	part-time *
Mallard	8	Eva	permanent	yes	yes	full-time	full-time *
Newton	9	Gail	permanent	yes	yes	full-time	full-time *
Rosslea	10A	Helen	permanent	yes	yes	full-time	full-time
	10B	Tracy	permanent	yes	yes	full-time	full-time
	10C	Kirsty	permanent	yes	yes	full-time	full-time
Strathyre	11	Lorna	permanent	yes	no	full-time	full-time *

Wallace	12	Niel	contract	yes	yes	full-time	full-time
PuSA HQ	14A	Bonni	permanent	yes	yes	full-time	full-time
	14B	Shona	permanent	yes	yes	full-time	full-time
	13	Ross	permanent	yes	yes	full-time	full-time

Notes:

- Bonni moved from Dunstane to PuSA HQ;
- Tracy moved from Dunstane to Rosslea;
- Louise moved from Hopetoun to Kirklea;
- * KA tasks were a portion of other work allocated;
- ** KA tasks were 'bolted on' to their existing roles.

5.3.1.2.3 Decision (2c) to modify Knowledge Analyst competency (2002-2007)

A KA job description approved in May 2002 in the initiation phase specified that Knowledge Analysts be recruited for 'Knowledge Management principles/practice' (#83). This referred to: content management/publishing; taxonomy/classification; K-Pack development; and development/ support of CoPs) mentioned earlier in the document (#83). The majority of Knowledge Analysts recruited, however, had PuSA 'Knowledge Management' experience (strategy, planning, evaluation and research). See Table 5–6. This suggests that some subsidiaries either: (1) failed to differentiate between PuSA's KM 'facts and figures' and KW 'people and technology' competencies; (2) expected Knowledge Analysts to develop both KM 'facts and figures' and KW 'people and technology' competencies; or (3) deliberately chose not to recruit for external 'KM' (i.e. KW) competencies specified in the KA job description. As a consequence, some Knowledge Analysts developed hybridised KM/KW competencies.

Table 5–6: Knowledge Analysts’ work experience

Subsidiaries and HQ	Knowledge Analysts (A, B or C refer to number of KA's in post)		Information management and web development	Change management and business processes	KM: Strategy, Planning, Research and Evaluation	Marketing, Public Relations	Various roles in PuSA	K-Web or Business Transformation
Ashcroft	1	Sarah			✓		✓	
Berwick	2	Jane	✓		✓		✓	
Carnegie	3A	Alison				✓	✓	✓
	3B	Jessie	✓	✓	✓			
Dunstane	4A	Bonni			✓		✓	
	4B	Tracy					✓	
	4C	Alana			✓		✓	
Glenview	5	Arthur				✓	✓	
Hopetoun	6A	Louise	✓				✓	
	6B	Gordon			✓			
Kirklea	7A	Kyle			✓		✓	✓
Mallard	8	Eva			✓		✓	
Newton	9	Gail			✓			✓
Rosslea	10A	Helen			✓		✓	
	10C	Kirsty					✓	✓
Strathyre	11	Lorna			✓	✓		

Wallace	12	Niel	✓					
PuSA HQ	14B	Shona			✓		✓	
	13	Ross	✓					✓

Source: personal profiles on the PuSA's intranet available to all PuSA staff

PuSA HQ recruitment restrictions did not prevent subsidiary senior management from recruiting Knowledge Analysts with KW competencies. When HQ Senior Management 'agreed to reduce [PuSA's] headcount [by a quarter], this operating model took account of [PuSAs] financial allocations and the necessity of attracting and retaining high quality and motivated staff' (#82). Only one member of the KW task force (Niel) had any formal external 'KM' qualifications (a postgraduate KM certificate). There is, however, no evidence to suggest that the lack of KW competencies was perceived to be a problem by either the KW Team or subsidiary senior management. Since Knowledge Working was a new initiative, there was an expectation that the KW Team would train the Knowledge Analysts to deliver KW tools (CoPs, intranet and k-packs) in their respective subsidiaries.

The KW Team's experience, with the exception of one staff member who had external CoP developed experience, was gained by working with external consultants and contractors. An evaluation document written in 2005 states that all individuals involved in BT Programme 2 (2000-2003) were given 'rewarding personal development opportunities' that provided them with 'an injection of new skills and knowledge' (#384). This process of tacit up-skilling was important as a 'train-the-trainer' (a label used in PuSA) approach was the norm in PuSA. External consultants or contractors would train a core group of specialist staff, who in turn, would train other staff to deliver training to all PuSA staff members. The BT Knowledge Workstream members, who had gained the necessary knowledge and skills to operationalise Knowledge Working during BT Programme 2, were selected to form a new KW Team in April 2003 responsible for training the Knowledge Analysts. The Knowledge Analysts, in turn, would train all PuSA staff in 'ways of working' (#92) with knowledge.

5.3.1.3 Decision (3) to modify the Knowledge Working toolkit (2002-2007)

Between 2002 and 2007 an additional fifteen KW tools were added to the KW toolkit, bringing the total count to twenty one. These new KW tools added to the six already selected in the initiation phase of the adoption of Knowledge Working between July 2001 (CoPs, k-packs and intranet) and May 2002 (business analysis, social capital analysis, and social network analysis to support CoP development). By November 2002, when KA recruitment began, a further four tacit tools (cynefin modelling, archetypes, ashen technique and narrative techniques) were added to the KW toolkit to support the development of CoPs.

The intranet was the first KW tool scheduled for operationalisation in March 2003. The KW Team (with the approval of HQ Senior Management), however, decided to postpone the implementation date to December 2003 due to technology problems (#201). A September 2003 document describing 'hopes and fears' (the label used in PuSA) shows that the Knowledge Analysts felt that '[they could not] get on with the job [of operationalising Knowledge Working] until the intranet launches' (#136). The Knowledge Analysts felt that 'further delays to the intranet has damaged their reputation following investment of large amounts of time' (#136). Moreover, other 'one network' tools (CoPs and K-packs) were subject to unanticipated operationalisation problems. For example, CoPs required the development of tacit skills to aid their delivery and k-packs content became redundant unless updated regularly. As a consequence, four more tools (after action reviews, knowledge café, knowledge capture, and knowledge market) were added to the KW toolkit between September 2002 and October 2005 to support 'local delivery' in subsidiaries.

A further four KW tools were added to the KW toolkit in response to other PuSA staff needs: (1) Isla introduced stakeholder planning in October 2003 to manage subsidiary stakeholder expectations for Knowledge Working (#172); (2) the KW Team purchased web trends software (circa August 2004) to clarify/confirm intranet usage in PuSA (#320); (3) HQ CEO 3 initiated a 'best practice' pilot project in August 2004 as part of Business Improvement Programme 3 (#318); and (4) the KW Team introduced CoP assessment in February 2006 to confirm/clarify the value of existing CoPs in PuSA (#412).

In total, a number of primary and secondary (or supporting) KW tools were introduced between 2002 and 2007 (see Table 5–7 on page 207). Primary tools, with the exception of best practice, were rolled-out across PuSA. The secondary tools either support primary tools or are reliant on primary tools for implementation. In Table 5–7 the primary and secondary tools are mapped against the four main characteristics of management innovation identified in Chapter 2. It: (1) exhibits novelty; (2) shows evidence of implementation; (3) intends to further organisational goals or enhances performance; and (4) alters the way managerial work is performed (see section 2.2.1 page 13 in Chapter 2).

The KW tools in Table 5–7, with the exception of the intranet and stakeholder planning, can be considered novel as they were introduced in PuSA for the first time. The new PuSA community-inspired intranet, however, represented a radical change from two previous versions of the intranet. This 'new' intranet was based on a different technological infrastructure had many novel features that had never been introduced in PuSA before. It can be argued, that although two previous versions of the intranet existed, this new community-inspired intranet can be considered a novel management innovation.

Implementation took place when these KW tools were put into use for the first time. In PuSA CoPs were perceived to be 'implemented' after: (1) the appointment of a HQ senior management sponsor; (2) drafting and signing an operating plan; and (3) officially launching the CoP through either a 'high profile fanfare big event or a low key new today intranet feature' (#145). Table 5–7 shows that some KW tools were implemented on an experimental basis, whilst others were rolled-out across the organisation. In PuSA, however, implementation also occurred on an ad-hoc basis as and when the opportunity arose.

In isolation, many of these secondary KW tools cannot be considered management innovations in their own right. They did not significantly alter the way managerial work was performed because they were not integrated into PuSA's mechanistic coordinating controls (systems, processes, policies, and procedures). Nevertheless, collectively these KW tools comprise 'a programme' of management innovation introduced for the first time to manage knowledge processes in PuSA.

In PuSA implementation of KW tools was either mandatory or voluntary. Mandatory implementation occurred when HQ make an authority decision for all staff to adopt KW systems tools (the intranet and e-records management) that were rolled-out across the organisation. Table 5–7 shows that the remaining KW tools were voluntary tools. PuSA staff were thus given the choice to either adopt or reject KW tools.

Table 5–7: KW tools approved and/or introduced between 2001 and 2007

KW tools		Date approved for implementation or date introduced into KW toolkit	Date training guidance was made available	Characteristics of management innovation									
				(1) Novelty	(2) Implementation					(3) Furthers goals		(4) Alters work	
Primary	Secondary				Experimental	Ad-hoc	Roll-out	Mandatory	Voluntary	One network	Local delivery	Incrementally	Significantly
CoP development (7)		July-2001	Aug-2003	✓	✓	✓			✓	✓		✓	✓
	Cynefin modelling (1)	Nov-2002	May-2003	✓		✓			✓	✓		✓	
	Business needs analysis	May-2002	May-2003	✓		✓			✓	✓		✓	
	Social capital analysis	May-2002	May-2003	✓	✓	✓			✓	✓		✓	
	Social network analysis (3)	May-2002	Jun-2004	✓	✓	✓			✓	✓		✓	
	Archetypes (3)	Nov-2002	May-2003	✓		✓			✓	✓		✓	
	Ashen technique (1)	Nov-2002	May-2003	✓		✓			✓	✓		✓	
	Narrative techniques (2)	Nov-2002	May-2003	✓		✓			✓	✓		✓	

	Community assessment (5)	Feb-2006	Feb-2006	✓		✓			✓	✓		✓	
Intranet (8)		July-2001	Dec-2003				✓	✓		✓			✓
	K-packs	July-2001	Aug-2003	✓	✓	✓			✓	✓		✓	
	Extranets (6)	Apr-2004	Oct-2004	✓	✓	✓			✓	✓	✓	✓	
	Webtrends (3)	Feb-2004	Sep-2006	✓	✓	✓			✓	✓	✓	✓	
	Knowledge café (2)	Oct-2005	Oct-2005	✓		✓			✓		✓	✓	
	Knowledge capture (6)	Apr-2004	Apr-2004	✓		✓			✓		✓	✓	
	Knowledge market (4)	Aug-2004	Aug-2004	✓		✓			✓		✓	✓	
	Stakeholder planning (4)	Oct-2003	Oct-2003			✓			✓	✓	✓	✓	
	Action based learning (2)	Oct-2003	Oct-2003	✓		✓			✓		✓	✓	
	After action reviews (8)	Sep-2003	Sep-2003	✓		✓			✓		✓	✓	
Best practice		Aug-2004	Feb-2006	✓	✓				✓	✓			✓
e-Records management (3)		Aug-2003	Aug-2003	✓	✓		✓	✓		✓			✓

Source: Louise's personal emails, KA weekly updates, KA monthly meetings, KA training events

Note: numbers in brackets refer Knowledge Analysts located in HQ and Berwick, Glenview, Rosslea, Kirklea and Strathyre subsidiaries who had experience using these KW tools in February 2006

5.3.1.4 Decision (4) to modify the Knowledge Working diagnostic process (2003)

In the initiation phase three diagnostic tools (business needs analysis; social capital analysis, and social network analysis) were approved in May 2002 to identify 'one network' CoP development needs/problems to address (#84). These 'malleable' (Mammam, 2002; 2009) diagnostic tools, however, were not suited to 'local delivery'. This lack of 'compatibility' (Rogers, 2003) between 'one network' KW diagnostic tools and 'local delivery' led Marlene to develop a substitute 'local delivery' consultancy process labelled the 'knowledge-needs-route-map' as a means of 'responding to business need' at a subsidiary level (#139). Marlene developed this route-map in conjunction with an IBM consultant between June 2003 and November 2003 (#139; #199). This new consultancy process consisted of five-stages. Each stage had suggested timeframes, core tasks and participants. Guidance was prepared for stages 1, 2, 3 and 5. This included: how to log an enquiry in stage 1; how to deliver a workshops in stage 2 and 3; and how to measure the value of Knowledge Working in stage 5 (#199). Descriptions of KW tools available were included in stage 4.

The route-map represents a fundamental change in theorisation from facilitating 'one network' working to identifying, as stated in the route-map guidance, '[operational] objectives that the business unit hope to achieve (or the problem they wish to solve)' (#199). In the route-map guidance document it states that 'the first step in using the Knowledge Working toolkit is to analyse the business' using business analysis tools such as SWOT (strengths, weaknesses, opportunities, threats), MOST (mission, objectives, strategy, tactics), and PESTLE (political, economic, social, technological. legal, environmental) (#199). It was added that 'where possible, these objectives should be referenced back to the business unit's balanced scorecard objectives, measures and targets' (#199). Those issues that could not be addressed through the application of KW tools were meant to be signposted to other relevant members of PuSA staff that could. In the route-map guidance document it also says that Knowledge Analysts 'should not talk about solutions with staff but should focus on business

objectives (for example, we need to increase market penetration by 10%)’ (#199). This theorisation reflects a new Knowledge Working aim of enhancing firm performance as opposed to facilitating ‘one network’ working.

The first step in the route-map was to log enquiries or requests for assistance that ‘is likely to come to the Knowledge Analyst’ (#199). This did not happen in practice as: (1) Knowledge Working was a new management innovation and its value had not been established; (2) no attempt was made to include KW tools into existing HQ mechanistic coordinating controls (for example, systems, processes, policies, and procedures); and (3) Marlene and Isla told the Knowledge Analysts in December 2003 not to communicate this framework to subsidiaries as it was purely a methodological approach to identify business needs and implement Knowledge Working ‘solutions’ (a label used in the route-map guidance) (#200). The outcome was that the Knowledge Analysts, as mentioned in an email from Ross to KA colleagues in March 2005, began ‘touting for business’ to identify ‘local delivery’ needs/problems to address at subsidiary level (#243).

The modifications in: (1) formal organisational structure; (2) recruitment and selection of Knowledge Analysts; (3) number of tools in the KW toolkit, and (4) local agenda-setting process (knowledge-needs-route-map) caused problems and delays in operationalising Knowledge Working in PuSA between 2002 and 2007. These will be explored next.

5.3.2 The operationalisation episode (2002-2007)

The previous section explores the modifications that took place as a result of poor decision-making in the matching episode of the implementation phase of Knowledge Working between 2001 and 2003. The analysis now turns to problems in operationalising Knowledge Working in PuSA between 2002 and 2007. This included:

1. Problems training Knowledge Analysts (2002-2007);
2. Problems identifying subsidiary problems/needs (2003-2007);
3. Problems managing and coordinating Knowledge Analysts (2003-2006);
4. Problems managing subsidiary stakeholder relationships (2003-2006).

These problems can all be traced to HQ senior management's decision to introduce a disaggregated KW task force with distributed line management.

5.3.2.1 Operationalisation problem (1): training Knowledge Analysts (2002-2007)

Knowledge Analysts had to be trained to operationalise all KW tools to enable 'local delivery' in their respective subsidiary locations. Initial training concentrated on implementing PuSA's new intranet (version 3). Technical problems, however, meant that the intranet launch was postponed from March 2003 to December 2003 (#201). To improve KW 'observability' (Rogers, 2003) in subsidiaries additional KA training was scheduled to facilitate 'local delivery'. It was not till Isla was recruited in August 2003, however, that a structured training programme was introduced (ten months after the first Knowledge Analysts were recruited in November 2002) (#146). Meeting minutes of a KA line managers meeting in September 2003 reports that Isla asked line managers 'to bear with' the Knowledge Analysts whilst they received 'comprehensive training for the first four to six months' (#168). The meeting minutes also show that KA line managers were warned that individual Knowledge Analysts would not have the necessary skills to deliver all KW tools for a period of twelve to fifteen months (#168). The time required for Knowledge

Analysts to develop necessary skills to operationalise *all* KW tools resulted in a significant loss of momentum in operationalising Knowledge Working.

One aspect of training included setting up 'expert groups' (labelling used in PuSA) (#183). Isla and Marlene divided the Knowledge Analysts into three groups, each containing four Knowledge Analysts that worked in close geographic proximity. Isla and Marlene suggested that this would allow subsidiaries to tap into the skills of another Knowledge Analyst located nearby (#183). Each expert group was led by a member of the KW Team and monthly training ranged from reviewing how an intranet search was conducted, to shadowing at a CoP development workshop. The sharing of Knowledge Analyst resources, however, did not work in practice due to subsidiary 'fiefdom' norms of hoarding staff resources. An August 2004 field note indicates that some subsidiary Knowledge Analysts were not perceived to be achieving 'local delivery' if they were helping colleagues operationalise Knowledge Working in other locations (# 313). Whilst these expert groups started off well, they were concluded before they had run their course (#321).

Additional training was scheduled when new KW tools were added to the KW toolkit between 2002 and 2006 (see Table 5–7 on page 207). In theory, the addition of new KW new tools broadened the range of tools suited to 'local delivery'. In practice, this increased range of KW tools meant that the Knowledge Analysts were continually expected to undertake more training. In addition, other training was scheduled between 2003 and 2005. Training included: (1) setting aside portions of monthly Knowledge Analyst meetings inviting people from different areas of the business to talk about their work; (2) arranging PuSA core courses to develop facilitation, presentation, influencing, and negotiating skills; (3) arranging workshops in consultancy skills and business analysis; (4) promoting attendance at external KM conferences, workshops or seminars in London; and (5) introducing PuSA 'Business Improvement Series' events hosted by KM 'thought leaders' (#192). Isla and Marlene also bought each Knowledge Analyst a book titled 'The complete idiot's guide to Knowledge Management' written by Clemmons Rumizen in December 2004 (#344).

Knowledge Analysts training was supplemented by guidance notes on what the KW tools were and how to operationalise them. An analysis of events and texts between the period 2002 and 2006, however, shows that dates for the introduction of KW tool guidance and the KA training did not necessarily coincide. Moreover, the guidance introduced was not always a final, but a draft version. In some instances further guidance was required. For example, in May 2005 Marlene clarified the role of Knowledge Analysts in organising and facilitating two-day CoP development workshops (#380). This delay between provision of guidance and training caused a delay in implementing KW tools.

The lack of tacit training is most obvious towards the end of this research. Eight Knowledge Analysts present at a Knowledge Analyst in February 2006 meeting mapped their experience of using KW tools (#409). The numbers next to the KW tools in Table 5–7 on page 207 gives an indication of the number of Knowledge Analysts who had experience using them. This table illustrates that: (1) all the Knowledge Analysts present at the February 2006 meeting had experience using only two of the tools (after action reviews and the intranet); (2) more than half had experience using four other tools (community development, community assessment, knowledge capture, and extranets); and (3) less than half had experience using ten KW tools (cynefin modelling, action based learning, archetypes, ashen technique, knowledge café, knowledge market, narrative techniques stakeholder planning, records management and web trends). The analysis here illustrates that these eight Knowledge Analysts had developed little experience of delivering the majority of the KW tools by February 2006.

The KW Team had unrealistic expectations that the Knowledge Analysts would feel confident operationalising, in particular CoPs and other tacit tools, when they did not have the necessary facilitation skills or the time to gain tacit experience. For example, a field note describes how many of the Knowledge Analysts had not yet had the opportunity to ‘shadow on’ many of the KW tacit tools by March 2004 (#226). Another field note gathered at a CoP development day in August 2004 states that the primary KW Team CoP facilitator worked

with IBM management consultants for a year before she ran a workshop on her own (#322).

The Knowledge Analysts were not at all comfortable at being regarded as instant experts after minimal training (#441). For example, a March 2004 field note describes Tracy's concern in delivering an after action review session of a major subsidiary project that she considered 'a shambles' and 'politically sensitive' after only one shadowing opportunity (#246). In another example, a field note of a telephone conversation with Louise in June 2004 reports that Isla mentioned to Gail that she was an 'expert facilitator' after helping to facilitate a recent CoP development workshop (#291). Gail disagreed with this accolade and, in a later discussion group post in March 2005, stated that 'two days training and shadowing on a few workshops does not an expert facilitator make in my opinion' (#362). This lack of tacit training led a Knowledge Analyst to describe implementing some KW tools as 'a baptism by fire' in an anonymous KW survey conducted in 2004 (#354).

An after action review session held in February 2007 shows that the majority of the Knowledge Analysts thought the training was too concentrated, sometimes irrelevant, and often untimely. In contrast, Eva and Kirsty (who joined later) praised the individual training and support they received (#441). This was because the KW Team could devote more time to training these individual Knowledge Analysts. The Knowledge Analysts were not always sure which training courses they had to attend or what they entailed. For example, in an email to Louise in September 2004, Jane said: 'I don't recall having seen descriptors for any of the so-called 'core' training courses. Seems to be a case of turning up on the day, then deciding if it's relevant!' (#331). The majority of Knowledge Analysts thought that there was little opportunity to apply the training to relevant 'live tasks' (#441). Although the Knowledge Analysts knew how to use some of the KW tools, they did not always know what to do with them. A reason for this was that none of the KW tools were included in PuSA mechanistic coordinating controls (systems, processes, policies or procedures) as originally intended. As such, there was no clear application for their use.

5.3.2.2 Operationalisation problem (2): identifying subsidiary needs/problems (2002-2007)

The Knowledge Analysts experienced problems in agenda-setting (identifying 'local delivery' needs/problems to address) in their respective subsidiaries between 2002 and 2007 because the KW diagnostic tools (business needs analysis, social capital analysis, and social network analysis) were not suited to identifying 'local delivery' needs/problems at subsidiary level. Here, two examples have been chosen to illustrate problems Louise had in agenda-setting in Hopetoun subsidiary between 2004 and 2005. These are indicative of agenda-setting problems the other Knowledge Analysts experienced in the same time period.

The first agenda-setting problem relates to: (1) subsidiary staff time constraints, and (2) Knowledge Analysts requirement to 'sell' KW tools without promoting them. An August 2004 field note illustrates that Hopetoun's CEO thought that Knowledge Working was 'adding more to the job' and emphasised staff time constraints (#306). Louise was aware of time concerns and resorted to matching pre-existing subsidiary problems with KW tools. For example, in the subsidiary balanced scorecard cross-team working was identified as an issue to address (#225). A field note shows that, in a discussion with a subsidiary director in May 2004, Louise mentioned Social Network Analysis could be used to measure the effectiveness of cross-team working (#266). This would highlight any problems in cross-team working that could be subsequently addressed.

Isla, however, did not approve of 'matching' (Rogers, 2003) KW tools to existing subsidiary needs/problems (#276). A field note gathered in May 2004 shows that, in a subsequent one-to-one meeting held in May 2004, Isla admonished Louise for suggesting a KW tool without undergoing the steps detailed in the knowledge-needs-route-map (# 276). Louise questioned why a KW tool could not be mentioned if there was a clear application for its use. In response, Isla reiterated that the Knowledge Analysts were to follow the steps in the route-map process before suggesting KW tools to use (#276). A field note of an after action review conducted in February 2007 highlights that Shona also thought

'there [was] a contradiction in being told to sell KW tools and then not being able to influence or recommend KW tools to use during initial "sales" discussions' (#441).

The reason Knowledge Analysts were expected to follow the route-map process can be seen in the route-map guidance issued in December 2000. In this document, it says: 'Knowledge Working is not about [operationalising] KW tools for the sake of it. It is about using KW tools to respond to business need; tools that will help the business do its job better' (#199). This illustrates that the route-map process was introduced to validate the introduction of KW tools. Validation was important because, as a February 2005 KW CoP review reveals, 'the Knowledge Analysts [were] selling network products and services [the subsidiary was] not certain it [wanted or needed]' (#357). The Knowledge Analysts were therefore expected to first validate a subsidiary problem/need, and only then suggest a KW tool to address this problem/need.

The second agenda-setting problem relates to lack of subsidiary senior management support for the balanced scorecard. At a KA monthly meeting in March 2004 Isla and Marlene suggested the Knowledge Analysts prepare for local agenda-setting consultations by requesting the subsidiaries Balanced Scorecard (#242). This, they thought, would help identify any potential 'knowledge elements' that could be used to initiate discussions with staff. The Balanced Scorecard, however, was yet another HQ initiative that had little subsidiary senior management support (#247). The majority of senior management teams delegated the development and maintenance of their balanced scorecards to the subsidiary KM Teams (#247). A field note gathered from a meeting in April 2004 reports that only one (from Kirklea subsidiary) of the six participants invited to share their experiences in developing subsidiary balanced scorecards thought subsidiary senior management 'bought into' the initiative. The other five participants thought subsidiary senior management were perpetuating 'the myth' that it was being used in their subsidiaries (#247).

The problems in identifying 'local delivery' needs led Isla and Marlene to begin identifying 'hooks' Knowledge Analysts could use 'to start talking with colleagues about Knowledge Working opportunities' (#264). Three examples of 'hooks' suggestions in KA weekly update emails between April 2004 and June 2004 include:

- In April 2004 the Knowledge Analysts were asked to introduce themselves to their product managers and explore the software they used in product development process. It was anticipated that the Knowledge Analysts could provide 'additional guidance to product managers currently going through the product development procedures' (#265);
- In July 2004 changes to the approval process for major projects was announced on the intranet. The Knowledge Analysts were told 'this is an area where you can work with colleagues locally to embed this' (#305);
- In August 2004 Carnegie subsidiary held a customer forum to improve customer satisfaction. The Knowledge Analysts were told that 'this is an example of activity happening across PuSA where the role of the KA can provide and demonstrate added value' (#311).

An analysis of Isla and Marlene's 'hooks' suggestions and additional 'information gathering' requests, and Hopetoun and Kirklea's senior management response to these requests, reveals that Louise did not undertake this work because in some cases: (1) there were no clear instructions on what the Knowledge Analysts were meant to do; (2) Knowledge Analyst involvement was deemed unnecessary following subsidiary discussions; (3) the work was more relevant to, or part of the work of, other subsidiary staff members; or (4) intervention was best undertaken at a CoP level.

This last point is worth further exploration. In PuSA HQ developed and introduced 'one network' mechanistic coordinating controls (pan-organisational systems, processes, policies and procedures) with little input from the subsidiaries (#300). This is an example of discursive closure by means of disqualification described by Deetz (2000). Many subsidiary problems arose when trying to apply these 'one network' mechanistic coordinating controls to suit 'local delivery' situations. It was for this reason that some Knowledge

Analysts questioned whether these issues would be better addressed at a CoP level. Pan-organisational CoPs promoted 'one network' working, and would provide a forum for subsidiaries to address 'local delivery' problems. A field note gathered in August 2004 at a KW CoP sponsor meeting, however, shows that Knowledge Analysts were not perceived to be achieving 'local delivery' if work focused on a 'one network' initiative (#313). Knowledge Analyst time devoted to CoPs minimised time that could be spent on other 'local delivery' tasks considered more important.

5.3.2.3 Operationalisation problem (3): managing and coordinating Knowledge Analyst resources (2002-2006)

The KW Team did not have the legitimate power to coordinate and monitor Knowledge Analyst resources due to distributed line management arrangements. As subsidiary line managers started to allocate more 'local delivery' tasks from mid-2003 the power struggle for Knowledge Analyst resources intensified. Isla and Marlene adopted, what was described as a 'command and control' approach in a KW survey, to coordinating and monitoring the Knowledge Analysts (#354). The Knowledge Analysts were subject to this 'command and control' regime as: (1) subsidiary line managers initially requested that Knowledge Analyst 'local delivery' performance reviews include feedback from Isla and Marlene (#272); and (2) the operationalisation of 'one network' KW tools was dependant on collaborative working. The Knowledge Analysts remained subject to this command and control regime until the KW Team Director changed Isla and Marlene's role from a coordination to a 'liaison' (a label used in PuSA) one in May 2005 (#381). A field note illustrates that Isla and Marlene immediately requested to be removed from the network Knowledge Analysts email group (#383).

Initially, there was no requirement for a KW Team 'command and control' approach to coordinating and managing Knowledge Analyst resources. An analysis of the number of posts and threads on a discussion group set up in January 2003 shows that it was heavily used in 2003 and 2004. In this time period there were 50 discussion threads with 385 posts and 46 discussions threads with 317 posts respectively. In 2005, however, usage dramatically declined with only 26 discussion threads and 96 posts. This was due to a number of reasons: (1) subsidiary management were allocating Knowledge Analysts more 'local delivery' tasks unrelated to Knowledge Working; (2) a KW Team decision (with approval from Knowledge Analysts) that this be opened up to all members of the KW CoP in March 2004 (#227); and (3) a change in discussion thread monitor when Niel left PuSA when his contract ended in 2005. The last post to the discussion group was made in November 2005. A lack of 'commitment trust' (Swan et al, 2005 p. 98) and KW task force communication led Isla and Marlene to adopt a 'command and control' approach to ensure 'local delivery' took place.

An analysis of KA weekly update emails and KA monthly meeting reports between 2002 and 2005 illustrates that the Knowledge Analysts were expected to undertake duplicate project management tasks to aid 'local delivery'. Each Knowledge Analyst was expected to: (1) update a spreadsheet of work activities on a weekly basis; (2) develop and update a 100-day rolling communications and stakeholder plans; (3) provide subsidiary management with monthly summaries of KW performance; (4) monitor the usage of KW tools and staff satisfaction with KW performance on a six-monthly basis; (5) develop local action plans; and (6) as well as provide a list of success stories on a regular basis.

In Hopetoun subsidiary (between the period 2003 and 2005) Louise was not required to undertake all the project management tasks mentioned above. Louise did not provide regular KW monthly updates as Hopetoun's CEO did not think this necessary. Instead, an action plan was deemed sufficient for the purpose of updating senior management on Knowledge Working work undertaken. Louise did update the KW spreadsheet with a detailed plan of work

from January 2004 to August 2004. However, Louise (with approval from the KA line manager) agreed she discontinue use as only three of the fourteen Knowledge Analysts were updating it (#326).

The analysis here illustrates that subsidiary senior management exercised power either purposely or inadvertently to suit 'local delivery' expectations. The Knowledge Analysts were able to exercise hidden power to avoid undertaking these tasks because: (1) they were not line managed by the KW Team; and (2) the KW Team did not discuss these administrative requirements with subsidiary senior management.

5.3.2.4 Operationalisation problem (4): managing subsidiary stakeholder relationships (2003-2006)

The KW Team had additional subsidiary stakeholders to manage because KA line management was distributed across PuSA. To manage subsidiary stakeholder relationships Isla and Marlene initiated three formal meetings between September 2003 and October 2003: (1) monthly Knowledge Analyst meetings (#168); (2) monthly one-to-one meetings with the Knowledge Analysts and their KA line managers (#174); and (3) quarterly KA line manager meetings (#272).

When the first Knowledge Analysts were recruited in November 2002 they met on a monthly basis to share experiences operationalising Knowledge Working (#106). After Isla was recruited in August 2003 these meetings became more formalised: either Isla or Marlene set the agenda and chaired these meetings. They were quite prescriptive on how these meetings should be run. In an email in January 2004 Marlene asked the Knowledge Analysts to choose two projects to discuss and it were told: 'you may wish to consider the following: any network-wide implications or examples of best practice; use of KW tools to support the project, next stages, and support you may require to ensure completion' (#208). This structured approach was not ideal: in an email to Louise in June 2004 Arthur commented: '...what we really need to do is talk

about what we've actually been doing – whether or not our particular activities 'fit' with the theory of what Knowledge Analysts should be doing' (#275).

The monthly KA meetings between 2003 and 2005 never had full attendance and on average three Knowledge Analysts tendered their apologies. The reasons for this included: (1) absence due to illness; (2) time required to travel to meeting locations; (3) time restraints due to 'local delivery' work; and (4) increasing pessimism regarding the value of these meetings. These monthly meetings were scheduled to take place every two months from April 2005 (#373) and then only every quarter from August 2005 (#393).

The second type of meeting introduced in October 2003 included monthly one-to-one meetings with individual Knowledge Analysts and their line managers (#174). These meetings were held to: (1) ensure that the Knowledge Analyst workload was balanced; (2) to offer advice in operationalising KW tools; (3) to gather good news stories; and (4) to identify areas of common activity (#174). These one-to-one meetings allowed Isla and Marlene to exercise information power as the Knowledge Analysts only met once a month. A field note captured at a KA development day in June 2004 shows that some Knowledge Analysts thought these meetings were often used to 'sell' activities that Isla and Marlene thought other Knowledge Analysts should be involved in (#290). This selling activity was a coercive strategy to stimulate 'local delivery' in the subsidiaries. Any requests for help to assist in 'local delivery' had to be directed through Isla and Marlene at these meetings or alternatively through email. Isla and Marlene thus became 'a gatekeeper or boundary spanner, that is, a person who scans and interprets the team's environment and then passes on information' (Hansen, 2002 p. 234). This gatekeeper role meant that knowledge sharing was restricted to those activities Isla and Marlene thought would promote 'local delivery'.

These one-to-one meetings with the Knowledge Analysts and their line managers were held separately (#174). The first meeting with either the Knowledge Analyst or their line manager was followed by a second meeting with the other party. In Hopetoun subsidiary, Louise's KA line manager did not question this arrangement and only attended these meetings occasionally. Isla or Marlene were thus able to exercise information power to influence how Louise's work was undertaken either through the presence or absence of the KA line manager. A field note gathered in August 2005 shows that Kirklea's KA line manager stated that he was 'not interested in [Isla and Marlene] playing us off against one another' (#325). By the beginning of 2005 these meetings only took place at the behest of the Knowledge Analyst. This was because Mark, following the results of a 2004 KW survey, decided that Isla and Marlene would no longer coordinate the Knowledge Analysts. Instead, they would only liaise with the subsidiary Knowledge Analysts as necessary (#381).

The third type of meeting introduced in September 2003 was a subsidiary KA line manager meeting (#168). These meetings were to be held on a quarterly basis and actions from these would be gathered in 'contact reports'. The contents of two 'contact reports' in 2003 and 2004 show that these meetings were used to: (1) provide an update on KW priorities, activities and progress; (2) outline proposed training for Knowledge Analysts; (3) discuss work allocation and performance objectives; (4) provide examples of how various KW tools could be used; and (5) promote problems in time allocated to Knowledge Working. Only three KA line manager meetings took place: one in September 2003; another in January 2004; and the last in May 2004. The next scheduled meeting coincided with a KW CoP sponsor in August 2004, where problems with the structure and management of Knowledge Analysts were discussed. Knowledge Analysts thought that, after this KW CoP meeting, Mark asked Isla and Marlene to discontinue coordinating and monitoring them (#441). This explains why the KA line manager meetings and one-to-one meetings were either discontinued or held when requested.

The analysis here shows that these four operationalisation problems can be traced to HQ Senior Managements decision to create a disaggregated KW task force with distributed line management during the initiation phase of Knowledge Working (2002-2003).

5.3.3 The clarification/confirmation episode (2002-2007)

The modification and operationalisation episodes above describe and explore modifications that took place in PuSA between 2002 and 2007 and resultant problems in operationalising Knowledge Working at a 'local delivery' subsidiary level in the same period. In this clarification/confirmation episode the analysis turns to problems in clarifying/confirming:

1. what Knowledge Working was (2002-2006);
2. the nature of the Knowledge Analysts role (2002-2006);
3. who could allocate Knowledge Analyst work (2000-2008);
4. Knowledge Working performance (2004-2008).

5.3.3.1 Problem (1): clarifying/confirming what Knowledge Working was (2002-2006)

The decision to introduce 'Knowledge Working' labelling in July 2001 in the initiation phase caused problems in clarifying what Knowledge Working was in the implementation phase. No explanation was offered for this change in labelling in July 2001. Previous analysis in the initiation phase in Chapter 4, however, suggests that the meaning of Knowledge Management was already institutionalised in PuSA during K-Web Programme 1 through: (1) the introduction of a KM Directorate responsible for the functions of strategy, planning, research and evaluation (#30); and (2) a Knowledge Management Information System responsible for automating the planning and financial reporting functions of the KM Directorate (#69). The label 'Knowledge Working' was meant to distinguish between KM 'facts and figures' and KW 'people and technology' work involved in managing knowledge in PuSA. The recruitment of Knowledge Analysts into local subsidiary KM Teams, however, caused further

signification problems. For example, in Hopetoun and Wallace subsidiary staff asked Knowledge Analysts for research and information on the local economy.

A field note captured at a KW CoP meeting in August 2004 reports that some Knowledge Analysts felt that it was difficult to communicate what Knowledge Working was to PuSA staff 'because [it] was what the external world called 'Knowledge Management' (#313). Moreover, in PuSA, the label 'Knowledge Management' was associated with KM 'facts and figures' work. The KW Team, therefore, omitted the label 'Knowledge Management' in any communications with PuSA staff. For example, on the front page of the KW CoP intranet site in September 2004 it said: 'outwith [PuSA] there are other explanations that define what working with knowledge is all about' (#328). These explanations included links to an external National Health Service (NHS) KM website and a link to KM books, as well as a definition of KM by Collison and Parcell (2001) taken from their book *'Learning to Fly. Practical Knowledge Management from Leading and Learning Organisations'*. In PuSA, the mismatch between internal and external labelling caused problems in validating Knowledge Working to staff.

In February 2003 a member of the Design Authority wrote a document trying to clarify/confirm what Knowledge Working 'was' (#113 #219). In this document, it said that 'these notes have been prepared to help with the process of explaining and embedding Knowledge Working across [PuSA]' (#113 #219). They were meant to 'provide a common basis of understanding across the [KW] community, which community members can then promote through their work with colleagues' (#113 #219). A 2004 revised 'What is KW?' document (#219) shows that a broad 'proposed definition' for Knowledge Working was offered:

“Knowledge working” (KW) refers to the activities and behaviours required by [PuSA] to enable the creation, capture, sharing, storage, retrieval, analysis and application of knowledge [to achieve greater internal efficiency and effectiveness; provide products and services to customers; and provide strategic intelligence and performance management information]. It embraces both the knowledge in the heads of individuals

(tacit knowledge), and the knowledge held in documents and storage systems (explicit or codified knowledge)' (# 219).

This broad definition was used on PuSA's intranet throughout the period 2003 to 2007 to clarify/confirm what Knowledge Working 'was'. A 'What is Knowledge Working' document (2004 version), and other strategy documents (a KW strategy (#92) and knowledge architecture (#93) approved in the initiation phase in October 2002), did not clarify/confirm what Knowledge Working 'was': a 'Knowledge Management' programme (comprising a KW task force and KW toolkit) introduced in the initiation phase (2001-2003) to manage knowledge processes in PuSA to support 'one network' working. An analysis of the content of these documents shows that they did not specify: (1) a clear aim for Knowledge Working (for example, to support 'one network' working); (2) the nature of change (for example, depth, extent, and direction of organisational change); (3) strategy for Knowledge Working (personalisation or codification); (4) approach (push innovation-centred or pull problem-centred); (5) nature of participation (mandatory or voluntary); or (6) nature of operationalisation (trial experimentation first or full-roll out). This lack of clarity in what Knowledge Working 'was' caused much confusion in the Knowledge Analyst role.

5.3.3.2 Problem (2): clarifying/confirming the nature of the Knowledge Analysts' role (2002-2008)

Initial confusion surrounding the KA role was due to poor PuSA communications. The first communication PuSA staff received about the KA role was in a news item that appeared on the intranet in March 2003, five months after the first Knowledge Analysts (Sarah; Jane, Alison, Bonni, Arthur, Gail, and Helen) were in post (#116). In this news item the Knowledge Analysts are described as 'catalysts to bring about a change in culture within PuSA – a culture of Knowledge Working' (#116). In a knowledge capture interview, prior to leaving PuSA in March 2005, Niel noted that the KA role was 'not marketed to local management sufficiently in advance of taking up post' (# 257). Niel mentioned that, when he was first recruited in July 2003, 'nobody knew what

was expected of the [KA] role and no one had any expectations of it. [This] led to 'what are you doing here?' rather than 'what can you help us with?' A June 2003 field note reports that Louise was told that she would have to give Hopetoun senior management 'a steer' on what the KA role entailed if recruited (#141).

An analysis of meeting outputs for the period 2002 to 2004 shows that there was: (1) a 'lack of clarity about the work and its scope'; (2) a 'lack of clarity over local [delivery] versus [one] network priorities'; (3) a 'lack of defined [KA] role', (3) a fear that the KA role was perceived to be 'a joke'; (4) a fear that the KA role 'would spiral out of control'; and (5) a question 'where does the [KA] role start and stop?' (#210). By mid-2004 these issues had not been addressed.

A field note of a telephone conversation in August 2004 reports that Isla told Louise that it was up to the Knowledge Analysts to be firm and clear on what their subsidiary KA role was (#315). When Louise asked how the Knowledge Analysts would achieve this given that other subsidiary Knowledge Analysts and KA line managers had different KA role perceptions, Isla stated that nobody had approached her with this problem. Isla offered to sit down and explain the KA role to Louise. Louise did not think this would resolve the problem and asked whether the difference in opinions could be broached at a future meeting. Isla declined and stated that she 'would decide the most appropriate manner in which to deal with this matter' (#315). A field note of a telephone conversation Gail had with Louise in June 2005, mentions that she had an argument with Isla regarding the all-encompassing nature of the KA role (#391). Nevertheless, the differences in KA role perceptions were never addressed. It was not in the KW Team's interest to clarify the KA role as performance (in general) was based on subjective perceptions of what Knowledge Working was.

Often, the Knowledge Analysts themselves did not agree on what their role should be, as the following thread posted on the KA Practitioners' Discussion Group in June 2005 shows (#390).

'Hi all, a little concerned that [Knowledge Analyst] facilitation is viewed as scribing [in other words, writing] on flip charts. Our time is a little more precious than that. Can we as a group clarify what we mean by facilitation and where we best add value' (Louise post to KA discussion group, June 2005 #390).

'I don't know if you can expect all staff to be able to facilitate discussions. It is a skill and not one everybody wants or needs to acquire. When we feel we are being asked to just scribe we should be making clear what else we bring to the event. My tendency is not to turn down these opportunities cos as soon as you are at the flip chart and have the pen in hand it is at the very least an opportunity to practice facilitation skills' (Ross post to KA discussion group, June 2005 #390).

'Good arguments, but for me time is limited. I do take the point that if you have an 'in' this will open up more discussion...this is fine if we are 'facilitators' to be called on to facilitate many different events, workshops etc.. If we aren't, then some boundaries on types of "knowledge related" things we do facilitate should be drawn' (Louise post to KA discussion group, June 2005 #390).

'I think taking the role of key network facilitators wouldn't be a bad aspiration. From that position we could get closer to the business and benefit the organisation with KW tools more. Most facilitation in this organisation ends up having a knowledge sharing implication' (Ross, post to KA discussion group, June 2005 #390).

'I would be happy to see us move to a frontline facilitation role. To be distinguished, of course, from a mere scribing during a conversation - that will lead to undermine both that facilitator role and KA role' (Niel post to KA discussion group, June 2005 #390).

'...practically just not do-able for us to be trying to facilitate everything in [PuSA]. And, we can of course, buy real facilitation experts in if required....' (Gail post to KA discussion group, June 2005 #390).

Despite a number of debates regarding various aspects of the KA role, consensus was seldom reached.

5.3.3.3 Problem (3): clarifying/confirming who could allocate Knowledge Working tasks (2002-2007)

A KA briefing pack document written in August 2002, before the first Knowledge Analysts were recruited in November 2000, raises three KA role-related questions: (1) 'what is my local role?'; (2) 'what is my national role?'; and (3) 'who is my boss? - the biggest question of all' (#87). This illustrates that from the outset there were tensions regarding Knowledge Analyst reporting lines in PuSA. A lack of clarity in reporting lines created problems in determining who could allocate work to the Knowledge Analysts over the period 2002 to 2007.

The structural authority to allocate work (in general) at a pan-organisational level lay with HQ Senior Management. HQ Senior Management introduced a number of pan-organisational mandatory initiatives (see Table 5–8). When HQ Senior Management introduced mandatory initiatives, however, decision-making regarding implementation roles frequently bypassed the KW Team. Instead, the subsidiaries CEO's were asked to nominate relevant staff. This meant that some Knowledge Analysts were allocated pan-organisational work unrelated to Knowledge Working. Table 5–8 shows the number of Knowledge Analysts involved in both mandatory Knowledge Working and other PuSA initiatives in August 2004.

Table 5–8: PuSA pan-organisational mandatory projects initiated between 2002 and 2006

PuSA mandatory projects	Date initiated or came into force:	Initiated by:	KW project?	Number of KA's involved in these initiatives
Balanced Scorecard	Late 2001	PuSA HQ		5
Customer Relationship Management	April 2004	PuSA HQ		7
Internet	Circa 2000	PuSA HQ		4
Intranet	December 2003	PuSA HQ	✓	7
Freedom of Information	January 2005	Political Directive		5
e-Records Management	August 2004	PuSA HQ	✓	3
Reuse of Public Sector Information	July 2005	Political Directive	✓	1

Source: KA weekly updates, KA monthly meetings, emails from Louise's personal email account

Louise was allocated a role in these pan-organisational projects (with the exception of the internet) between 2003 and 2007. In an email sent to Louise in March 2004, Marlene gave her this advice relating to the allocation of pan-organisational roles:

‘Your role is to take an overview of everything that is being asked of the subsidiary in [PuSA initiatives such as] records management and customer relationship management etc. and to provide strategic guidance on the best way for your subsidiary to approach each’ (#241).

The Knowledge Analysts involved in these pan-organisational projects, however, were given operational and not strategic roles. For example, Louise was allocated a customer relationship management (CRM) training role in both Hopetoun and Kirklea subsidiaries between the period 2004 and 2006. The reason for this was that the CRM project manager assumed a strategic role in operationalising the project at subsidiary level.

The delegated authority to allocate work (in general) lay with subsidiary senior management. An analysis of Louise’s tasks whilst employed in Hopetoun subsidiary and Kirklea subsidiary between June 2003 and March 2007 shows that: (1) Hopetoun management adopted a ‘wait and see’ approach to determine how Knowledge Working (an HQ-driven initiative) would develop. Of the fifteen tasks in Louise’s task portfolio, eleven were led by the KW Team, one by an external partner, and only three by the subsidiary itself. The low number of tasks initiated by Hopetoun management illustrates that they were allowing the KW Team to initiate KA work; and (2) Kirklea management took a lead in introducing and initiating Louise’s ‘local delivery’ work tasks. Of the fifteen allocated tasks, five were led by PuSA HQ, one by an external partner and nine by the subsidiary. The high number of subsidiary allocated tasks illustrates that Kirklea management had clearer expectations for the KA role.

Louise had a role in defining what Knowledge Working was in Kirklea, and divided tasks (even those unrelated to Knowledge Working) into two categories: 'organisational learning' and 'information management'. This re-labelling allowed Louise to clearly communicate what the KA role meant in Kirklea subsidiary.

5.3.3.4 Problem (4): clarifying/confirming Knowledge Working performance (2002-2006)

At a KA monthly meeting in March 2004 Isla and Marlene told the Knowledge Analysts their stakeholders were not happy with progress in operationalising Knowledge Working (#231). In the minutes of this meeting it says stakeholders thought Knowledge Analysts 'level of engagement/visibility' in KW activities was inadequate. Equally, senior management were concerned about the perceived 'lack of delivery' (#231). This perceived lack of 'observability' (Rogers, 2003) was due to a number of number of factors, none of which the Knowledge Analysts had any power over. For example, in the period between November 2002 and March 2004 the Knowledge Analysts had no power over: (1) HQ senior management decisions to delay both the intranet and e-records management projects; (2) subsidiary senior management decisions to: (a) restrict the amount of time Knowledge Analysts spent on KW tasks; and (b) allocate them alternative 'local delivery' work deemed more valuable.

The results of a KW survey (2005) provides some insight into why subsidiary management were not happy with Knowledge Analysts performance (#354). The survey results show that subsidiary stakeholders had different views of: (1) their level of understanding of the KA role; (2) the perceived benefits of Knowledge Working; and (3) Knowledge Analyst skills required for the job. This illustrates that the perception of poor performance is not always based on tangible outcomes but subjective perceptions. Not surprisingly, the Knowledge Analysts felt that subsidiary management did not have a collective understanding of Knowledge Working or their role in operationalising it.

To address negative stakeholder perceptions of performance, Isla and Marlene constructed a graph in June 2004 detailing the amount of time the other Knowledge Analysts spent undertaking Knowledge Working activities. A field note from a KA meeting in August 2004 mentions that Isla and Marlene produced this graph, and presented it to subsidiary senior management, to try and secure Knowledge Analyst resources for Knowledge Working activities (#317). An August 2004 field note shows that Hopetoun's CEO and KA line manager were not happy that Louise was not undertaking as much KW-related work as other subsidiary Knowledge Analysts (#307). In response, Louise explained that this graph was not an accurate portrayal of the KA role: other subsidiary Knowledge Analysts had a role in the balanced scorecard and yet this was not reflected in the graph.

A field note of a telephone conversation Louise had with Isla about this KA resource graph in August 2004, reports that Isla contends that there will be different role KA perceptions of Knowledge Working depending on: (1) what the Knowledge Analysts thought their role was; (2) what subsidiary senior management perceived their role to be; and (3) subsidiary circumstances (#315). By casting all work Knowledge Analysts did as Knowledge Working, a very positive message regarding KA performance was conveyed, but the reach and impact of Knowledge Working in PuSA was diminished. This coercive strategy meant to achieve discursive closure by means of pacification described by Deetz (2000). The discourse of 'everything is Knowledge Working' was a means to pacify subsidiary senior management. It signified that the Knowledge Analysts were delivering Knowledge Working in their respective subsidiaries. In order to maintain this façade of progress, however, the Knowledge Analysts had to change their perception of their role.

This discourse of 'everything is Knowledge Working' drew attention away from fact that the KW Team, as mentioned by Marlene in a one-to-one meeting with Louise in August 2004, could not deliver what they had promised with current resources (#308). When Louise asked whether she could introduce this as a topic of discussion at a Knowledge Analyst Meeting the CoP Sponsor was due to attend in August 2004, Marlene replied 'please do' (#308). Following this one-to-one meeting with Marlene, Louise emailed the other Knowledge Analysts to suggest undertaking a 'quick audit of time allocated for Knowledge Analyst activities and other 'hats you wear'' (#309). To gauge a true reflection of Knowledge Analyst work, Louise asked the other Knowledge Analysts to complete a task portfolio (see Table 5–9 on page 235).

The purpose of the task portfolio was to provide a picture of common activities that could clearly be designated as those relating to the KA role, and other activities the Knowledge Analysts were involved in. Since the Knowledge Analysts themselves were having difficulty distinguishing between Knowledge Analyst work and subsidiary work, Louise suggested that Knowledge Analyst work related to anything the Knowledge Analyst did that incorporated the use of KW tools (#309). The task portfolio shows that a great proportion of time was devoted to other job-related tasks. Louise presented this at the KW CoP meeting in August 2004 (#313). In response, the CoP sponsor stated that he could not understand how the Knowledge Analysts could do their job effectively if they were not allowed to work across organisational boundaries. In trying to highlight resource problems and seek clarity regarding the KA role, the task portfolio demonstrated that Knowledge Working was failing to deliver any benefits due to lack of time and resources.

Field notes of telephone conversations Louise had with both Isla and Marlene in August 2004 shows that they criticised this 'fiefdom' representation of Knowledge Analyst work (#315, #316). It did not match the KA resource graph they had constructed and presented to subsidiary senior management in July 2004. Isla stated that the distinction between Knowledge Analyst and other subsidiary work provided an inaccurate picture of the breadth of work undertaken as "all work' was Knowledge Analyst work' (#315). This did not clarify/confirm the KA role. Some Knowledge Analysts became increasingly frustrated and deliberately sought out 'local delivery' work to enhance their future employment prospects.

Table 5–9: Knowledge Analyst task portfolio (August 2004)

	Glenview	Newton	Carnegie	Berwick	Wallace	Mallard	Berwick	Strathyre	Roslea	Hopetoun	Dunstane	HQ 1	HQ 2
NUMBER DAYS ALLOCATED FOR KW	5	5	1.5	2	5	2.5	5	2	5	4	1.5	5	5
WORK RELATING TO USE OF KW TOOLS													
<i>PERSONALISATION KW TASKS</i>													
Aligned to Community of Practice (how many?)		2		1	2			1		2			
Action Based Learning / After Action Reviews		✓			✓						✓		
Knowledge Capture Interviews					✓								
Facilitate local events or workshops	✓	✓		✓	✓			✓		✓	✓	✓	✓
Facilitate other events or workshops	✓	✓	✓		✓					✓		✓	✓
<i>CODIFICATION KW TASKS</i>													
Intranet: Area Manager	✓			✓	✓	✓	✓	✓				✓	
Intranet: developing CoP spaces		✓		✓	✓					✓			✓
Developing Project Spaces	✓	✓		✓		✓				✓			✓
Social Capital Analysis													✓

Social network analysis							✓						✓
K-packs	✓												✓
Metadata							✓						
WORK UNRELATED TO USE OF KW TOOLS													
INFORMATION TECHNOLOGY													
Internet		✓		✓	✓		✓						
General ICT assistance or training							✓			✓			
CORPORATE SUPPORT PROJECTS													
Freedom of Information		✓		✓		✓	✓			✓			
E-Records Management						✓	✓			✓			
Customer Relationship Management (CRM)		✓		✓	✓	✓	✓	✓		✓			
KNOWLEDGE MANAGEMENT													
Operating Plan (Strategy & Planning)		✓	✓	✓							✓		
Performance (KM Information System)			✓			✓					✓		
Balanced Scorecard: lead role				✓	✓		✓			✓	✓		
Balanced Scorecard: change initiatives		✓		✓			✓				✓		
Other partnership work	✓		✓					✓		✓	✓		
RESEARCH & EVALUATION													
Research		✓		✓				✓			✓		

Evaluation				✓				✓			✓		
PUSA INTERNAL GROUP-RELATED WORK													
Customer Satisfaction							✓			✓	✓		
Staff Satisfaction						✓				✓			
EXTERNAL GROUP-RELATED WORK													
Scottish parliamentary contact	✓							✓					
Other groups or forums				✓	✓	✓	✓	✓		✓	✓		

Source: Documents from Louise's personal email account

5.4 Summary and conclusion

This chapter has explored the implementation phase of the process of adoption across three episodes: modification; operationalisation; and clarification/confirmation. The analysis draws attention to the importance of decision-making in the matching episode in the initiation phase. Many problems experienced in the implementation phase can be attributed to a decision to introduce an infrastructure for Knowledge Working that was not compatible with the agenda for 'one network' organisational change. Moreover, this operating model allowed the subsidiaries to exercise power to implement Knowledge Working to suit 'local delivery' circumstances. This resulted in independent working, resource hoarding, and diversity in KW tasks characteristic of a 'fiefdom' syndrome (Herbold, 2005).

Despite these problems, there is evidence that KW tools were implemented in PuSA. In addition to experimentation and full roll out, ad-hoc implementation took place. Ad-hoc implementation, however, did not have a significant influence on changing managerial practices. This illustrates the importance of incorporating tools into existing mechanistic coordinating controls (systems, processes, policies and procedures). This lack of system integration, and the range of problems highlighted in the analysis above, suggests that a decision might be taken to discontinue Knowledge Working. To determine whether this was the case the analysis now turns to the outcomes phase of the adoption process.

6 Chapter 6: The outcomes phase of Knowledge Working

6.1 Introduction

The aim of this chapter is to investigate the outcomes phase (the third and final) phase of the process of adoption of Knowledge Working in PuSA. From the research framework in Figure 3–7 on page 133 in Chapter 3 the outcomes phase consists of all activities involved in either: (1) ‘routinising’ or ‘incorporating the innovation into existing organisational [routines]’ (Rogers, 2003 p. 138); (2) discontinuing adoption due to ‘disenchantment’ (or ‘dissatisfaction with performance’) or ‘replacement’ of the innovation with something better (Rogers, 2003 p. 190).

This analysis explores and describes contextual factors leading to decisions to: (1) disband the overall KW Team and re-label and reassign two teams (organisational learning and information management); and (2) disband the KW Community of Practice in 2006.

In this study reference is made to two internal networks (management and practitioner). A new HQ CEO 3, a member of PuSA’s management network, initiated a third organisational change programme (Business Improvement Programme 3) mentioned in section 3.3.1.2 on page 95 in Chapter 3. It was within this third programme of organisational change that formal structural changes were considered. Reference is also made to the KW Team, Subsidiary Senior Management and Knowledge Analysts.

6.2 Decisions to either discontinue or continue adoption (routinise) Knowledge Working (2004-2007)

A limitation of this study is the lack of data beyond decisions to routinise, or discontinue, elements of Knowledge Working in PuSA. Three decisions are explored:

1. A decision to commit to routinising Knowledge Working in subsidiaries from May 2005;
2. A decision to discontinue the KW Team and routinise two teams 'organisational learning' and 'information management' in 2006;
3. A decision to discontinue the KW CoP in 2006.

6.2.1 Routinisation decision (1): subsidiaries commit to routinising Knowledge Working from May 2005

The contextual factors leading up to Subsidiary Senior Management decisions to commit to routinising Knowledge Working will be explored here. The 'story' begins with the structure chosen in the initiation phase of Knowledge Working. A decentralised KA subsidiary operating model was contested throughout the period of KW implementation between 2002 and 2007. At a KW CoP sponsor meeting held in August 2003, Marlene mentioned that it was not until the KW Team were in place in April 2003 that the KW Team realised that the Knowledge Analyst structure was inappropriate (#313). Problems first became apparent when some subsidiary managers delayed the recruitment of Knowledge Analysts, and following recruitment, did not provide Knowledge Analysts with an appropriate allocation of time in which to undertake Knowledge Working-related work. This suggests that neither the HQ Senior Management Team nor the BT Knowledge Workstream anticipated the 'fiefdom' strategies PuSA subsidiaries would employ in recruiting and managing the Knowledge Analysts. This represents a failure to consider organisational norms.

Marlene stated that the KW task force structure 'could not be challenged' due to 'political ramifications' (#313). Although Marlene did not elaborate on what the consequences would be, any retrospective changes to this structure (agreed ten months previously) would undermine and challenge the subsidiary operating decisions made by the BT Knowledge Workstream and HQ Senior Management in the initiation phase of Knowledge Working in 2002. In May 2004 Mark asked Isla and Marlene to review various options for an alternative structure (#313). Three alternative operating models were being considered: (1) the structure remained as is and the subsidiaries asked to devote more time to KW; (2) a central shared service team would be recruited with less Knowledge Analysts; or (3) one Knowledge Analyst would work across two subsidiaries but would be line managed by the subsidiaries. Marlene mentioned that a wider KW stakeholder consultation exercise would have to be undertaken because some KA line managers did not think Knowledge Analysts should operate as a shared service (#313).

In September 2004 the KW Team drafted a KW survey questionnaire that was emailed to subsidiary management (CEO's, Directors and KA line managers) and Knowledge Analysts (#329). In this email Mark stated that: 'the purpose of this survey is to inform improvements in the effectiveness of the [KW task force operating] model that was put in place to support the embedding of KW practices [in PuSA]'. Mark posted the KW survey results to the intranet in February 2005 (#354). Jane's post on the KA's discussion group in March 2005 reflects the KW Team's recommendations:

'The report recommendation is that we maintain a [subsidiary] management structure, and [Mark] confirmed that we will definitely not shift towards a shared service. However, he also seemed to be suggesting that there are full-time KA's who could be better deployed working across geographic areas, and that those who are struggling with other priorities may prefer/be better placed to concentrate on non-KA activity [..]. I'm struggling to understand how on earth this kind of model could operate, whilst working under a [subsidiary] management structure?' (#364).

Email exchanges between Knowledge Analysts between February and March 2005 illustrates that they were not happy with these recommendations. For example, in an email to KA colleagues in February 2005 Niel says:

‘Same old guff then! What exactly does this mean? And what does this mean to [subsidiary] CEO’s? They will be in the same position of having to fight with [HQ] over [KA] time commitments’ (#355).

The KW survey (2005) outputs (#354) highlights that time spent on PuSA and subsidiary priorities were deemed unimportant by opposing parties. In addition, the KW Team and Knowledge Analysts both felt that there was not sufficient subsidiary time available for KW. To address these issues, in February 2005, Mark recommended that the KW Team and subsidiaries:

‘Improve existing model for [KW] by maintaining local line management of [KA’s], whilst exploring increased commitment of [KA] time to KW activities (across business units where useful), based on common understanding of, and commitment to [subsidiary] and [PuSA] business priorities’ (#354).

The KW survey did allow the KW team to clarify/confirm what the subsidiary priorities were. In an email to Knowledge Analysts on May 2005 Mark said:

‘On priorities, rather than ask senior management for a specific time commitment on KW, I asked [subsidiary] CEO’s to ensure that local KW priorities are agreed and are drawn from top business priorities, and thereafter, that those KW priorities are fully resourced. If you haven’t already heard from your [KA line] manager or [subsidiary] CEO, could you move to get those priorities and resources agreed and forward a copy to Marlene so that we can support you on your local picture and know what to expect re: your participation on [one network] priorities’ (#378).

The Knowledge Analysts submitted their subsidiary priorities to the KW Team between May 2005 and September 2005. From these documents, the KW Team identified common priorities (#396). See Table 6–1 on page 244. This shows a decision to commit to routinising Knowledge Working at subsidiary level.

Table 6–1: Subsidiary and HQ common Knowledge Working priorities (December 2005)

Knowledge Working Priorities	Ashcroft	Berwick	Carnegie	Dunstane	Glenview	Hopetoun	Kirklea	Mallard	Newton	Roslea	Strathyre	Wallace	HQ
Best practice (3)		✓		✓		✓							
CoP development (9)	✓	✓	✓				✓	✓	✓	✓	✓		✓
Expertise/ experience mapping (2)	✓						✓						
General business support (8)			✓	✓	✓		✓	✓	✓	✓			✓
Generating new ideas (5)	✓	✓		✓						✓	✓		
Knowledge capture, sharing and learning (8)		✓	✓		✓		✓	✓	✓	✓	✓		
Technology: intranet/ extranets (10)	✓	✓		✓	✓		✓	✓	✓	✓	✓		✓
Technology: other (4)	✓						✓	✓	✓				
e-Records Management					✓		✓			✓			
Stakeholder management (2)						✓					✓		

Notes: the number in brackets refers to the number of subsidiaries with common priorities (Wallace subsidiary did not submit any).

6.2.2 Discontinuance decision (2): HQ Senior Management discontinue the KW Team and decide to routinise two teams 'organisational learning' and 'information management' in 2006

Although the KW task force operating model remained unchanged in 2005, it was reviewed again through a new Business Improvement Programme 3 (2004-2008). In the implementation phase HQ CEO 2 resigned and a new HQ CEO 3 was recruited in February 2004 (#220). Upon taking up post, HQ CEO 3 undertook a review of PuSA's operations. In April 2005, after months of speculation, HQ CEO 3 confirmed at the 'Making a Difference, Making it Happen' staff events that the structure of PuSA would be reviewed (#375).

HQ CEO 3 initiated a Business Improvement Programme 3 in July 2004 (#299). One of the change initiatives affecting the KW task force was a review of PuSA's formal organisational structure. In an email to the Knowledge Analysts in March 2006, Mark confirmed that: 'there is going to be a review of 'business support services' as set out in Friday's briefing. Any consideration of the KA role, along with the rest of support services [including the KW Team], will take place within that context' (#423). Anticipating changes, Mark changed the KW Team formal structure (#427). Rather than four teams (change and communications, tacit, explicit and metadata) there would now only be two labelled 'organisation learning' and 'information management'.

A month later, in June 2006, a network brief was emailed to PuSA staff (#428). Changes were announced 'to realign a range of support services across [PuSA]' (#428). An HQ email to all PuSA staff in August 2006 mentions that a new 'Corporate Services' Directorate was being established: this would include all the 'back-office' support functions (for example, Human Resources and Information Communication Technology) and the two KW Teams (#432). The KW 'organisational learning' team became a stand-alone team, whilst the KW 'information management' team was subsumed into a newly formed 'information services' team. This new team would become a 'one stop shop for all business demands related to information' (#432). Screenshots taken from the intranet in January 2007 reveals that KW labelling was no longer used.

This change in structure, however, did not clarify/confirm what would happen to the subsidiary Knowledge Analysts. When Louise left PuSA in February 2007 no decision had been made whether to continue or discontinue the KA role (#441).

6.2.3 Discontinuance decision (3): KW Director discontinues the KW CoP (2006)

Analysis of documents throughout the period 2003 and 2007 reveals that the informal CoP structure was yet another structural complication. When the KA's were first recruited it was anticipated that they would form a community of KW practitioners to share best practice and experience in implementing KW (#83). Towards the latter end of 2003 the KW Team, KA's, KA line managers, and other interested parties were taken through a two-day CoP development workshop (#157).

There was a continual tension between the formal functional versus informal KW CoP roles. This tension is reflected in the KW CoP charter's statement of their purpose. Whilst the original June 2002 CoP definition emphasised group sharing, learning, and collaboration, the purpose of the KW CoP focused on 'performing individual roles' (#157). For example, the KW CoP purpose was 'to enable members to perform individual KW roles more effectively, in order to develop and promote a KW culture and to increase knowledge sharing to help [PuSA] achieve its priorities' (#157). As a consequence, the KW CoP focused on issues such as KW Team priorities, the KA role, and KW resources. Although CoP members did note that the community aim and objectives were 'very individually focused', the core group made no attempt to change these (#157). This resulted in a difficulty in distinguishing between KW CoP and individuals' roles and activities.

The core group membership was contested as it was too hierarchical (#371). A KW survey respondent felt that: 'for me the core CoP is made up of the [KA's] since they are the practitioners [and] the rest of the community sits on the periphery and dip in and out where they feel they can provide expertise' (#354). A primary recommendation from Richard McDermott (2005), who co-authored the book '*Cultivating Communities of Practice*', was to acknowledge the KA's as the core community group (#357). Mark, however, rejected this decision. Instead, he proposed a 'looser definition' of the core group to ensure it was 'more representative of the CoP'. A revised KW CoP charter stated that the core group was voluntary and would not exclusively coordinate the CoPs activities. It would meet every two months. There would not be a CoP leader, but rather, a rolling core group chairperson. This resulted in more diverse group consisting of two KW Team members, four KAs, and two other CoP members.

An annual assessment of the KW CoP conducted by the KW Team in 2006, however, found that respondents thought the KW CoP had lost its focus and direction (#426). The ongoing tension between formal functional roles and informal community roles was still evident. The question was raised 'where does the KW function end and the community begin? (#426). The report also highlighted that the CoP had deteriorated: 'The community has not matured to any great extent [over the last three years]. Indeed observation suggests that many aspects of the community have in fact deteriorated over the last twelve months' (#426). The core group had not met on a regular basis since the beginning of the year. Moreover, community members, on average, were spending less than 1% of their time on community activities (#426). Although their managers encouraged members to participate in the community and members agreed that it is relevant to their job, they stated that time restraints prevented them contributing to the CoP (#426). As a consequence, Mark made a decision to discontinue the KW CoP in December 2006 due to dissatisfaction with performance (#440).

6.3 Summary and conclusion

This third, and final, analysis chapter has explored contextual events leading up to the decision to either discontinue or routinise Knowledge Working in PuSA. Three key factors: (1) dissatisfaction with the status quo (the KW task force operating model); (2) dissatisfaction with current performance (the KW CoP); and (3) additional organisational structural changes (part of another business improvement effort) motivated decisions to discontinue and routinise Knowledge Working in PuSA. The label 'outcomes' is thus an appropriate label to use when referring to the activities and decisions involved in either discontinuing or routinising a management innovation.

A summary of findings from the analysis reported in Chapters 4, 5 and 6, and a further review of documents and texts on the chronological timeline in Appendix A is presented in Table 6–2. This summary shows: key decisions (or groups of decisions) in each episode; contextual/facilitating factors influencing decision-making; and the consequences of decisions made over the period of adoption (2000-2008) of Knowledge Working in PuSA. This relates to RQ 9: *What lessons can be learned from this case?* Practitioners can draw conclusions from this summary and apply lessons learned.

In the next chapter 7, new theoretical insight about the process of adoption of management innovation as gained from the analysis in Chapters 4, 5 and 6, and the evaluation of literature in Chapter 2 will be discussed.

Table 6–2: A summary of findings across phases in the process of adoption of Knowledge Working in PuSA

<p>EXTERNAL AND INTERNAL DRIVERS FOR CHANGE</p>	<p><i>External drivers for organisational change includes:</i> (1) environmental changes, which are expressed as knowledge economy and e-business discourses (1996-2002); (2) political changes in PuSA's governance as a result of Scottish devolution (1997-2000); (3) UK Labour Government political directive to implement UK Modernising Government initiative (1999).</p> <p><i>Internal drivers for organisational change includes:</i> (1) an organisational context that is supportive of new thinking (1996 onwards); (2) the recruitment of a new HQ CEO 2 who needs to validate his position in PuSA (2000).</p>	<p>Outcome: initiation of Knowledge Web (K-Web) Programme 1 in 1999; and Business Transformation (BT) Programme 2 in 2000. K-Web and BT were introduced to change the organisation from one state to another – <i>see organisational change programmes 1 & 2 agenda-setting.</i></p>
<p>ORGANISATIONAL CHANGE PROGRAMMES 1 & 2 AGENDA-SETTING</p>	<p>In K-Web Programme 1 (April 1999 to March 2000) there was: (1) a need 'to better assess and report on PuSA's performance'; and (2) a need to 'acquire new infrastructure to enable knowledge sharing both internally and externally'.</p> <p>In Business Transformation Programme 2 (March</p>	<p>Outcome: initiation of innovations, including management innovation (Knowledge Working) between 1999 and 2004. The agenda for organisational change was to move from: (1) a pan-organisational 'fiefdom' state (autonomy; decentralisation; and inconsistency in operations) at</p>

	2000 to June 2003) there was: (1) a need to introduce e-business as part of the 1999 UK Modernising Government initiative; and (2) a need to become more effective, efficient and customer-focused. This second need was expressed as discourses (fiefdom; one network; local delivery; and network delivery) in the analysis.	pan-organisational level to a 'one network' state (collaboration; centralisation; consistency in operations) a pan-organisational level; and (2) subsidiary 'local delivery' state (independence, resource hoarding, and diversity in operations) to a 'network delivery' state (cooperation; resource sharing; and uniformity in operations).
Key decisions (or groups of decisions) made in each episode of the initiation phase	Contextual/facilitating factors influencing decision-making in each episode of the initiation phase	Consequences of contextual/facilitating factors and decisions made in each episode of the initiation phase
AGENDA-SETTING EPISODE: THE START OF THE INITIATION PHASE (2000-2002)		
A BT Programme 2 decision (A) in 2000 to identify potential KM (and KW) opportunities to address organisational agenda for 'one network'	(A-a): Need to improve organisational effectiveness and efficiency through 'one network' working. <i>This was based on BT Programme 2 need (2) – see motivation.</i>	(A-1) KW was a product of organisational change introduced during BT programme 2; (A-2) Requirement to: (A-2-1) undertake research to identify KM 'opportunities' for change; and (A-2-2) identify PuSA needs or problems these KM opportunities may address.

working.		
A BT Programme 2 decision (B) to approve a KW strategy in 2002. In this strategy the drivers for KW were: (1) to facilitate 'one network' working and (2) to extend PuSA's 'reach and impact into, and on, the economy'.	<p>(B-a) Need to validate KW to support BT Change Board's decision to adopt KW infrastructure in 2002 (see transition between phases);</p> <p>(B-b) The 'reach and impact' driver was based on work BT KW Knowledge Workstream undertook between 2000 and 2002 (for example, developing products and internet content) and not work the KW Team would be doing from 2003 (for example, implementing CoPs, intranet and k-packs).</p>	<p>(B-1) KW was perceived to be a product for organisational change - see <i>drivers in decision (B)</i>;</p> <p>(B-2) Confusion in the aim of KW: to further organisational goals or improve organisational impacts?</p> <p>(B-3) KW had a low relative advantage as it was a new programme of management innovation.</p>
KNOWLEDGE/RESEARCH EPISODE (2000-2001)		
A BT Programme 2 decision (C) to undertake: (1) leading practice reviews in 2000 to seek inspiration for the	<p>(C-a) Choice of BT initiatives/projects/tools had to promote radical, not incremental, organisational change;</p> <p>(C-b) Choice of BT initiatives/projects/tools not dependant on whether they could be automatically adopted;</p>	<p>(C-1) Knowledge of KM opportunities to match the agenda for 'one network' organisational change;</p> <p>(C-2) Knowledge of KM task force attributes (for example, location, management, competence, mandate, and remit) to match: (C-2-1) top-down or bottom-up direction of change; and (C-2-2) push</p>

<p>introduction of new KM ideas in PuSA; and (2) voice of the customer research in 2000 to validate the proposed introduction of KM practices and specialist KM (including later KW) task force resources.</p>	<p>(C-c) Choice of BT initiatives/projects/tools had to meet BT Programme 2 needs 1 & 2 (<i>see motivation</i>).</p>	<p>innovation-centred or pull problem-centred type of adoption; (C-3) Validation of: (C-3-1) need for KM practices to help staff do their jobs effectively; and (C-3-2) specialist KM task force resources to help manage knowledge.</p>
<p>MATCHING EPISODE (2001-2003)</p>		
<p>A BT Programme 2 decision (D) in 2001 to introduce malleable 'one network' KM (later relabelled KW) tools (CoPs, intranet and k-packs).</p>	<p>(D-a) Selection of KW tools needed to match the agenda for 'one network' culture change: sharing knowledge across PuSA.</p>	<p>(D-1) KW tools selected (CoPs, intranet and k-packs) and diagnostic tools (business needs analysis, social capital analysis; and social network analysis) matched the agenda for 'one network' working; (D-2) There was clarity in the depth of change (deep affecting organisational culture) and direction of change (top-down from experts to local users).</p>
<p>A BT programme 2</p>	<p>(E-a) Need to pacify subsidiary senior management as</p>	<p>(E-1) KW task force operating model did not match</p>

<p>decision (E) to introduce a disaggregated task force with a distributed line management in 2001.</p>	<p>they did not want additional HQ shared services staff imposed on them;</p> <p>(E-b) Failed to consider: (E-b-1) modifiability: whether the ‘one network’ malleable tools (in particular, CoPs and k-packs) were suitable for ‘local delivery’; (E-b-2) agenda-setting: whether the CoP diagnostic tools (business analysis questionnaire; social capital analysis; and social network analysis) were suitable for ‘local delivery’; (E-b-3) operations: whether the nature of KW work; the mode of KW task force working; no inclusion in PuSA mechanistic controls (processes, policies and procedures); and KW task force line management was suited to ‘local delivery’; and (E-b-4) culture: whether the subsidiaries would exercise their delegated authority to revert to ‘fiefdom’ norms of recruitment and management of KAs.</p>	<p>the agenda for ‘one network’ working: it promoted ‘network delivery’ instead.</p> <p>(E-2) General confusion in: (E-2-1) the extent of change (broad across functions or narrow within functions?); (E-2-2) the direction of change (top-down or bottom-up?); (E-2-3) management of change (centralised or decentralised?); (E-2-4) approach to change (push innovation-centred or pull problem-centred?);</p> <p>(E-3) KW ‘one network’ tools (in particular, CoPs and k-packs) and diagnostic tools (business needs analysis; social capital analysis; and social network analysis) selected were not suitable for ‘local delivery’ in subsidiaries;</p> <p>(E-4) Problems project managing the implementation of KW: (E-4-1) duplication of all aspects of KW project management (for example, training, promotions, evaluation etc.) to allow for decentralised ‘local delivery’; (E-4-2) KW Team inability to develop KW task force competencies that</p>
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		<p>matched staff strengths and interests, as well as task force skills gaps; (E-4-3) KW team had no KW task force slack to deploy staff where needed in PuSA and when needed to implemented KW tools; (E-4-4) KW task force had additional subsidiary stakeholders to manage and persuade to adopt KW (as opposed to focusing on just CoP stakeholders); and (E-4-5) KW Team performance reliant on the ability of subsidiary managed KAs to deliver both centralised ‘one network’ working and decentralised ‘local delivery’. <i>These consequences all increased the complexity in implementing KW.</i></p>
<p>A HQ decision (F) to introduce a KM label for ‘facts and figures’ work during W-Web Programme 1 in 1999, and a KW label for ‘people and technology’ work</p>	<p>(F-a) No precipitating factors for choosing KM label; (F-b) Meaning of KM label was already institutionalised as ‘facts and figures’ work the KM Directorate undertook from 1999; (F-c) Another label required for inclusion of new team (KW Team) in KM Directorate in April 2003.</p>	<p>(F-1) Mismatch with external cultural networks theorisation and labelling created later problems in promoting KW in subsidiaries: KAs felt that they could not promote KW because it matched external conceptions of KM; (F-2) KM/KW labelling created staff confusion between KM and KW: some subsidiary staff asked KAs for KM-related information.</p>

during BT Programme 2 in 2001.		
PERSUASION EPISODE (2000-2004)		
A HQ decision (G) between 2000 and 2003 to persuade PuSA staff of the relative advantage of BT programme 2 (and KW by association – see decision B and consequence B-1).	<p>(G-a) Subsidiary staff perception that ‘one network’ working signified reduced local authority to make autonomous decisions; loss of local innovation; and required subsidiaries to achieve more with fewer human resources;</p> <p>(G-b) Internal validation of KW as a product of and product for ‘one network’ working’ (see A-1 and B-1 consequences). KW was thus inextricably linked to BT Programme 2 persuasion;</p> <p>(G-c) External validation and funding of the BT Programme 2 by the Scottish Executive in 2000.</p>	(G-1) General subsidiary lack of persuasion for ‘one network’ working between 2000 and 2004 (and KW by association) due to low perceived relative advantage as a result of <i>facilitating factors (G-a) and (G-b)</i> .
TRANSITION BETWEEN THE INITATION AND IMPLEMENTATION PHASE		
An HQ senior management and BT change board decision (H) to implement BT	(H-a) There were no clear dates to mark the transition between phases. In the analysis a transition was deemed to have taken place after the approval of: a strategy for KW; an operating model for KW; and a KW task force (a final date of October 2002).	(H-1) A transition between initiation and implementation phases of KW.

Programme 2 in November 2001 and KW in October 2002.		
Key decisions made in each episode of the implementation phase (2002-2007)	Contextual/facilitating factors influencing decision-making in each episode of the implementation phase (2002-2007)	Consequences of contextual/facilitating factors and decisions made in each episode of the implementation phase (2002-2007)
MODIFICATION EPISODE (2002-2007)		
A subsidiary senior management decision (I) to omit the 'specialist services' team in subsidiary operating models between 2002 and 2007: KAs were typically included in subsidiary KM teams.	<p>(I-a) Unclear HQ communications in 2000 allowed subsidiary senior management to make autonomous decisions on how to implement the overall subsidiary operating model;</p> <p>(I-b) KM sponsorship of BT knowledge workstream during BT Programme in 2001 and 2002;</p> <p>(I-c) Inclusion of KM team in HQ KM Directorate in 2000 during K-Web Programme 1;</p> <p>(I-d) Subsidiary senior management disregarded HQ expectation that KAs report to, and work with, subsidiary senior management to implement KW (as stated in KA job description approved as part of HQs operating model in 2000).</p>	<p>(I-1) Staff perception problems: KW not perceived to be a programme for 'one network' change driven by senior management;</p> <p>(I-2) KAs could not report to, or work with, subsidiary senior management as HQ originally intended in 2002 – <i>see facilitating factor (I-d)</i>;</p> <p>(I-3) Further confusion between KM and KW work: staff did not distinguish between 'facts and figures' KM work and 'people and technology' KW work – <i>see consequence (F-3) in the initiation phase</i>.</p>

<p>A subsidiary senior management decision (J) to modify KA task force recruitment to suit 'local delivery' circumstances between 2002 and 2006.</p>	<p>(J-a) Subsidiary senior management were given the delegated authority to recruit and manage KAs – see <i>decision (E) in the initiation phase</i>;</p> <p>(J-b) Subsidiary senior management disregarded BT Programme 2 expectations that KAs: (J-b-1) be recruited by April 2003; (J-b-2) be given the same contractual conditions (senior executive grade; KA job title; full-time KA role); and (J-b-3) be recruited for KW 'people and technology' (CoP, intranet and k-pack) and other competencies (for example: communication, facilitation, influencing and networking skills; and experience in project management, roll-outs; and training staff);</p> <p>(J-c) Some subsidiary senior managers did not support 'one network' working and by association KW. Other 'local delivery' roles were deemed more valuable. See <i>consequence G-1 in the initiation phase</i>;</p> <p>(J-d) HQ senior management failed to intervene to secure recruitment of KA resources with consistent</p>	<p>(J-1) Subsidiary senior management exercised their legitimate power to fill the KAs posts to meet 'local delivery' requirements – see <i>facilitating factors (J-a), (J-b), (J-c), (J-d) and (J-e)</i>;</p> <p>(J-2) Modification in KA recruitment timeframes: some KAs recruited after April 2003 – see <i>facilitating factor (J-b-1)</i>;</p> <p>(J-3) Modifications in KA contractual conditions from 2002: some KAs did not have the same salary grade; some KAs did not have the same job tile; and the majority of KAs were given other 'local delivery' work deemed more valuable; - see <i>facilitating factor (J-b-2)</i>;</p> <p>(J-4) KA staff turnover between 2003 and 2007 occurred as a result of: (J-4-1) incompatibility with the KA role; (J-4-2) a lower salary grading than the KA job description specified; and (J-4-3) lack of senior management support for KW – see <i>facilitating factors (J-b-1), (J-b-2), and (J-b-3) and (J-c)</i>. This required some subsidiaries to recruit additional KAs;</p>
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	contractual conditions and required KW competencies.	(J-5) Modifications in KA competencies: only 1 KA had any formal 'KM' (or KW) qualifications; and the majority of KAs were recruited for KM 'facts and figures' experience that was incompatible with KW 'people and technology' work - see <i>facilitating factor (J-b-3)</i> .
A KW Team (and in some instances HQ senior management) decision (K) to modify the KW toolkit by adding additional KW tools, a total of 21 between 2002 and 2008, to address subsidiary 'local delivery' (and in some instances HQ needs).	(K-a) KW 'one network' tools selected (in particular, CoPs and k-packs) were not suitable for 'local delivery' in subsidiaries – see <i>consequence (E-3) in the initiation phase</i> ; (K-b) Some KW Tools experienced technical problems and others unanticipated implementation problems (for example, not enough trained KW task force staff available to implement CoPs) – see <i>facilitating factor (N-a) in the implementation episode</i> .	(K-1) KW Team sought inspiration from the cultural network for the addition of new KW tools to address 'local delivery' needs; (K-2) Additional KW tool guidance and KA training had to be introduced to implement additional KW tools.
A KW Team decision (L) to modify PuSA	(L-a) KAs experienced problems in agenda-setting (finding 'local delivery' problems or needs to address)	(L-1) Additional KW Team time spent developing the knowledge needs route map process and guidance

<p>staff agenda-setting process by substituting the CoP diagnostic process with a consultancy process labelled the 'knowledge needs route map' in 2004.</p>	<p>as: (L-a-1) CoP diagnostic tools (business needs analysis; social capital analysis) and social network analysis) were not suitable for 'local delivery' – see <i>consequence (E-3) in the initiation phase</i>; (L-a-2) Collective subsidiary problems occurred in operationalising 'one network' processes, policies, procedures, and systems. Some KAs felt that these problems were best addressed at CoP level; and (L-a-3) Subsidiary staff did not direct enquiries or requests to KAs for KW assistance because there was a lack of awareness of KW as it was a new management innovation. KW tools were not included in any PuSA control mechanisms (policies, processes, procedures).</p>	<p>to validate the introduction of KW tools: the implementation of KW tools now had to respond to business need;</p> <p>(L-2) Additional KA consultancy training required for KAs to put this process into use to facilitate 'local delivery' agenda-setting;</p> <p>(L-3) Knowledge needs route map guidance illustrates that KW validation was linked to addressing PuSA's performance rather than knowledge needs or problems. This created further confusion in the aim of KW: to further organisational goals or improve organisational impacts? – see <i>consequence B-2 in the initiation phase for initial confusion</i>;</p> <p>(L-4) KW Change Manager and KA Coordinator initially told KAs not to communicate this knowledge needs route map process to subsidiary staff. This meant that KAs could not clarify what their new consultancy role was;</p> <p>(L-5) KAs had to 'tout for business' and adopt a</p>
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		sales role to sell KW tools subsidiaries did not want or need – see <i>facilitating factor (L-c)</i> . There was a contradiction in Change Manager and KA Coordinator communications: KAs were told to sell the KW tools (including awareness raising) yet respond to business need before selling them (see <i>consequence L-1</i>).
OPERATIONALISATION EPISODE (2002-2007)		
HQ and KW Team decisions (N) to delay the roll-out of some KW tools (for example the intranet, records management, k-packs and web trends) between 2003 and 2006.	(N-a) Some KW Tools experienced technical problems and others unanticipated implementation problems (for example, not enough trained KW task force staff available to implement CoP's).	(N-1) Inability for the KAs to implement some KW tools until technical and project planning problems were addressed; (N-2) KA perception that delay in implementing the intranet damaged their 'local delivery' observability; (N-3) Requirement to arrange KA training to implement other KW tools to facilitate 'local delivery'.
KW Change Manager and KA Coordinator decision (O) to	(O-a) Inability for the KAs to implement some KW tools until technical and project planning problems were addressed – see <i>consequence (N-1)</i> ;	(O-1) There were problems implementing the KA training programme: (O-1-1) time anticipated to train all KAs to delivery all KW tools was 12-15 months;

<p>introduce a structured training programme for KAs in September 2003, 10 months after the first KAs were recruited.</p>	<p>(O-b) Requirement to arrange KA training to implement other KW tools to facilitate 'local delivery' – <i>see consequence (N-3)</i>;</p> <p>(O-c) Requirement to train <u>all</u> KAs to deliver <u>all</u> KW Tools in their respective subsidiaries (<i>see consequence E-4-1</i>) as and when subsidiaries recruited KAs (<i>see consequence J-2</i>).</p>	<p>(O-1-2) the introduction of KW tool guidance and training did not coincide; (O-1-3) guidance was not always the final version; and (O-1-4) KA time restraints due to other 'local delivery' tasks;</p> <p>(O-2) There was limited time for KAs to train on KW tools before being expected to implement them. KAs were not happy to be regarded as instant experts. This limited trialability, in turn, influenced KA 'local delivery' observability;</p> <p>(O-3) The outcome of training was: (O-3-1) some KAs had developed little experience of delivering the majority of KW tools by February 2006; and (O-3-2) some KAs felt that training was too concentrated, sometimes irrelevant, and often untimely.</p>
<p>KW Change Manager and KA Coordinator decisions to (P) introduce meetings to manage subsidiary stakeholders between</p>	<p>(P-a) KW Team performance reliant on KAs ability to achieve KW 'local delivery' in their respective subsidiaries – <i>see consequence (E-4)</i>;</p> <p>(P-b) Subsidiary stakeholder confusion in what KW entailed and what the KA role was. This was due to lack of clarity surrounding the KA role in early BT</p>	<p>(P-1) The KA Coordinator introduced KA monthly meetings when the first KAs were recruited in November 2002 to share experiences implementing KW. More formal meetings introduced in September 2003 never had full attendance because of: (P-1-1) absence due to illness; (P-1-2) time required to</p>

2003 and 2006.	communications.	<p>travel to meeting locations; (P-1-3) time restraints due to 'local delivery' work; and (P-1-4) increasing pessimism regarding the value of these meetings. Later, these monthly meetings were scheduled every two months and then only every quarter;</p> <p>(P-2) The KW Change Manager and KA Coordinator introduced one-to-one bi-weekly meetings in September 2003 to be held separately with line managers and KAs. These meetings were held to:</p> <p>(P-2-1) ensure that the KA workload was balanced; to offer advice in implementing KW tools; (P-2-2) gather good news stories; and to identify areas of common activity. These were later held on a monthly basis, and then only at the request of KAs;</p> <p>(P-3) The KW Change Manager and KA Coordinator introduced quarterly line managers meetings in September 2003. These meetings were held to: (P-3-1) provide an update on KW priorities, activities and progress; (P-3-2) outline proposed training of KAs; (P-3-3) discuss work allocation and</p>
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		<p>performance objectives; (P-3-4) provide examples of how various tools could be used; and (P-3-5) promote problems in time allocated to KW. Only three meetings were held and no reason given for discontinuance.</p>
<p>KW Change Manager and KA Coordinator decision (Q) to introduce a gatekeeper 'command and control' approach to managing and coordinating KAs from September 2003.</p>	<p>(Q-a) The decentralised KA subsidiary operating model meant that the KW Team did not have the legitimate power to coordinate and monitor the KA's work;</p> <p>(Q-b) KW team had no KW task force slack to deploy staff where needed in PuSA and when needed to implemented KW tools – <i>see consequence (E-4-3) in the initiation phase;</i></p> <p>(Q-c) KAs experienced problems in agenda-setting: CoP diagnostic tools (business needs analysis; social capital analysis) and social network analysis) not suitable for 'local delivery' – <i>see consequence (E-3) in the initiation phase;</i></p> <p>(Q-d) Stakeholders thought KW observability was low. This was due to: (Q-d-1) the delay in implementing the</p>	<p>(Q-1) Any KA requests for additional KAs to help 'local delivery' had to be directed through KW Change Manager and KA Coordinator gatekeepers;</p> <p>(Q-2) KA monthly meetings were exclusively chaired by either the KW Change Manager or the KA Coordinator. These meetings became more prescriptive in January 2004;</p> <p>(Q-3) One-to-one separate gatekeeping meetings with KAs and line managers were used to 'sell' activities that the KW Change Manager and KA Coordinator thought other KAs should be involved in – <i>see facilitating factors (Q-c);</i></p> <p>(Q-4) KW Change Manager and KA Coordinator told KAs to use subsidiaries balanced scorecards to identify 'local delivery' needs and problems to</p>

	intranet; (Q-d-2) the need to introduce new KW tools to allow for 'local delivery'; and (Q-d-3) time required to train KA's to delivery all KW tools to support 'local delivery'.	address. Balanced scorecards were another HQ initiative that had little subsidiary support – see <i>facilitating factors (Q-c)</i> ; (Q-5) KW Change Manager and KA Coordinator recommended yet more tacit training (shadowing of account managers) to compensate for low KW observability.
BT KW Workstream and KW Team KW CoP decision (R) to develop a KW CoP and appoint a KW CoP sponsor between 2003 and 2006.	(R-a) BT Knowledge Workstream and KW Team expectation that the KW task force would also go through a 2-day community development workshop and become a CoP.	(R-1) KW task force attended additional KW CoP workshops and meetings; (R-2) Confusion between KW task force and KW CoP roles: where did the KW task force role stop and the KW CoP role begin? (R-3) Promoted an individualistic rather than collective aim: the KW CoP existed to help individual members do their job better rather than work as a cohesive community sharing best practice etc. for the benefit of the group.
PuSA staff decisions (S) to adopt or reject KW 'one network'	(S-a) KW adoption/rejection decision was based on the relative advantage of the BT Programme 2 (see <i>decision B-1</i>) and KW Tools;	(S-1) A lack of staff support for: 'one network' working and lack of inclusion of KW tools in mechanistic controls (policies, processes, and

<p>and/or 'local delivery' tools between 2003 and 2007.</p>	<p>(S-b) KW adoption/rejection decision influenced by lack of PuSA mechanistic controls: inclusion of KW tools in PuSA processes, policies and procedures; (S-c) KW adoption/rejection decision dependant on the nature of participation (voluntary or mandatory adoption); (S-d) KW adoption decision based on the KW tools availability, appropriate technology and maintenance.</p>	<p>procedures) had a negative impact on decisions to adopt voluntary KW tools; (S-2) Subsidiary management support for KW, and early staff adopters had a positive influence on the decision to adopt voluntary KW tools; (S-3) A mandatory nature of participation had a positive impact on the decision to adopt some KW tools (for example, the intranet and records management); (S-4) Technological issues (for example, intranet search), maintenance issues (for example, K-pack content quickly becoming outdated), and CoP 'one-size-fits-all' workshop format, all influenced individual staff decisions to reject both mandatory and voluntary KW tools.</p>
<p>CLARIFICATION/ CONFIRMATION EPISODE (2003-2007)</p>		
<p>Design Authority and KW Team decisions (T) to clarify what KW was between 2003</p>	<p>(T-a) Need to clarify what KW was. There was confusion in: (T-a-1) the aim of KW (to further organisational goals or improve organisational impacts?) – see <i>consequence (B-2) and (L-3)</i>; (T-a-2)</p>	<p>(T-1) A Design Authority member wrote a paper in 2003 titled 'what is KW?' to clarify what KW was. This paper, however, did not clarify: (T-1-1) the aim of KW (further organisational goals or improve</p>

<p>and 2007.</p>	<p>the extent of change (broad across functions or narrow within functions); (T-a-3) the direction of change (top-down or bottom-up); (T-a-4) management of change (centralised or decentralised); and (T-a-5) approach to change (push innovation-centred or pull problem-centred) – see <i>consequence (E-2)</i>;</p> <p>(T-b) Need to clarify labelling: (T-b-1) there was a mismatch with external cultural networks theorisation and labelling created problems in promoting KW in subsidiaries – see <i>consequence (F-1)</i>; and (T-b-2) use of KM & KW labelling created staff confusion between KM and KW work (some subsidiary staff asked KAs for KM-related information) – see <i>consequence (F-3)</i>;</p> <p>(T-c) Need to clarify KW in PuSA to validate the transition decision to continue or discontinue adoption in the outcomes phase of management innovation.</p>	<p>organisational impacts?); (T-1-2) the direction of change (top-down or bottom-up); (T-1-3) management of change (centralised or decentralised); and approach to change (push innovation-centred or pull problem-centred) – see <i>facilitating factor (T-a)</i>;</p> <p>(T-2) The KW Team Director arranged clarifying meetings with subsidiary senior managers. These meetings, however, did not clarify: (T-2-1) the aim of KW (further organisational goals or improve organisational impacts?); (T-2-2) the direction of change (top-down or bottom-up?); (T-2-3) management of change (centralised or decentralised?); and (T-2-3) approach to change (push innovation-centred or pull problem-centred?). One subsidiary thought KW was ‘a pink and fluffy concept’ – see <i>facilitating factor (T-b)</i>;</p> <p>(T-3) The choice of label ‘KW’ was chosen because ‘KM jargon turns people off’ and KW was a term that applied to all PuSA staff. The KW Team omitted the</p>
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		<p>term ‘KM’ from their communications with staff. The KAs felt that they could not promote KW because it matched external conceptions of KM (a label already institutionalised in PuSA as ‘facts and figures’ work) – see <i>facilitating factor (T-b)</i>;</p> <p>(T-4) The Change Manager and KA Coordinator expected the KAs to undertake duplicate tasks to help clarify the KA role: (T-4-1) update a spreadsheet on KA weekly activities; (T-4-2) develop and update a 100-day stakeholder and communications plan; (T-4-3) provide subsidiary senior management with monthly KW performance summaries; (T-4-5) monitor the usage of KW tools; (T-4-6) monitor KW staff satisfaction on a 6-month basis; (T-4-7) develop local action plans setting out local KW agenda; and (T-4-8) provide a list of KW success stories on a regular basis – see <i>facilitating factor (T-d)</i>. These tasks, however, did not always match subsidiary expectations for the KW role.</p>
KW Team decisions	(U-a) KW communication objectives set in January	(U-1) A generic presentation was developed for

<p>(U) to clarify what the KA role was between 2002 and 2007.</p>	<p>2003 had not been achieved by August 2003: (U-a-1) subsidiary management would: understand the KA role and how it added value; manage staff expectations of the KA role; and support and champion KA's; (U-a-2) KAs would have a consistent understanding of the KA role; (U-a-3) PuSA staff would be familiar with the KA role and how KAs could support them;</p> <p>(U-b) Recruitment of a Change Manager to define the KA role and clarify the KA role (for example, where the KA role starts and stops) – see <i>facilitating factor (O-a 1-3)</i>;</p> <p>(U-c) KW Change Manager and KA Coordinator initially told KAs not to communicate this knowledge needs route map process to subsidiary staff. This did not clarify the KA role – see <i>consequence (L-4)</i>;</p> <p>(U-d) Subsidiary senior management, KA line managers, and KW Team all allocated work to the KA. Other roles were valued locally.</p>	<p>KAs to present to subsidiary staff to help clarify the role. This presentation, however, did not clarify: (U-1-1) the direction of change (top-down or bottom-up?); (U-1-2) management of change (centralised or decentralised?); and (U-1-3) approach to change (push innovation-centred or pull problem-centred?) – see <i>consequence (E-2)</i>;</p> <p>(U-2) The Change Manager and KA Coordinator developed a graph of the time KAs spent undertaking KA activities and presented this to subsidiary senior management. This did not present an accurate picture of the work KAs because the KW Change Manager maintained that there will be different perceptions of what the KA 'local delivery' role was. This graph did not clarify the KA role;</p> <p>(U-3) A KA constructed a matrix detailing what KW work (work that involved the use of KW tools) and non-KA work the KAs undertook. This illustrated that a great deal of non-KA work was allocated to the KAs. The KW Change Manager and KA Coordinator</p>
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		<p>criticised this matrix as it did not represent the breadth of KW work 'as all work was KA work';</p> <p>(U-4) The KW Change Manager and KA Coordinator promoted a discourse of 'everything is KW' to pacify subsidiary senior management: this discourse signified that the KAs were implementing KW. This appeased subsidiary stakeholders but created further KA confusion in what the KA role was;</p> <p>(U-5) The different KA role perceptions was never addressed as it was not in the KW Team's interest to clarify the KAs role. Subsidiary stakeholders' perception of KA and KW performance was primarily subjective;</p> <p>(U-6) KAs made attempts to clarify what their role entailed (for example, facilitation emails).</p>
<p>KW Director decision (V) to clarify the subsidiary KA operating model and KA role in 2004.</p>	<p>(V-a) Dissatisfaction with KW task force operating model decision - <i>see consequences (E-1), (E-2), (E-3) and (E-4) in the matching episode of the initiation phase;</i></p> <p>(V-b) Dissatisfaction with KA contractual conditions -</p>	<p>(V-1) The KW survey highlighted that subsidiary stakeholders held different views of: (V-1-1) their understanding of the KA role; (V-1-2) the perceived benefits of KW and the KA role; and (V-1-3) whether the KAs had the requisite skills required for the job;</p>

	<p><i>see (J-3) in the modification episode;</i></p> <p>(V-c) Need to clarify KW in PuSA to validate the transition decision to continue adoption in the outcomes phase – <i>same as facilitating factor (T-d).</i></p>	<p>(V-2) The KW survey highlighted that time spent on PuSA priorities were deemed unimportant, and vice versa;</p> <p>(V-3) The KW survey drew attention to the ‘command and control’ approach to coordinating and managing the KAs. After a subsequent conversation with one KA the KW Director changed the KW Change Managers and KA Coordinators coordination role to a liaison one in 2005: only liaising with KAs if they requested it;</p> <p>(V-3) KW Director recommendations: (V-1-1) maintain the existing KW task force operating model;</p> <p>(V-1-2) Subsidiary senior management to commit time to KW activities (across PuSA where useful);</p> <p>(V-1-3) Subsidiary senior management to agree subsidiary KW priorities.</p>
<p>KW Team decision (W) to clarify KW value and/or performance between</p>	<p>(W-a) KW strategy (2002) stated that quantitative and qualitative metrics would be developed for individual KW tools, for example, ‘the pattern (efficiency) of knowledge exchange across [PuSA] using CoP</p>	<p>(W-1) External validation was sought by: (W-1-1) writing an intranet case study that appeared in two internet magazines in April 2004; (W-1-2) presenting the KW social network analysis tool at an ark group</p>

<p>2002 and 2007.</p>	<p>diagnostic tools'. However, these diagnostic tools were not suitable for local delivery;</p> <p>(W-b) No KW Team and KA joint performance objectives were established. Knowledge Analysts were given generic guidance on the KW objectives and measures for the year's 2002/2003 and 2003/2004. In subsequent years no generic guidance was set because KAs had local work plans in place and others were allocated additional 'local delivery' tasks;</p> <p>(W-c) Substitution of KW CoP diagnostic process with a consultancy process to identify 'local delivery' needs or problems. Knowledge needs route map guidance illustrates that KW validation was linked to addressing PuSA's performance rather than knowledge needs or problems. This created further confusion in the aim of KW: to further organisational goals or improve organisational impacts? – see <i>consequence B-2 in the initiation phase for initial confusion.</i></p>	<p>conference; (W-1-3) presenting PuSA's community 'tool-kit' at the KM forum in June 2004; (W-1-4) introducing business improvement series workshops inviting KM guru's to talk about their work; and (W-1-5) sponsoring a KM medal at a Scottish university in March 2005;</p> <p>(W-2) Some KAs arranged local intranet surveys in 2005. Thereafter, members of the KW team suggested setting up a working group to discuss and address issues arising from these local surveys;</p> <p>(W-3) A working group was set up in March 2004 to investigate 'how a measurement framework might evolve for KW'. In 2006 a 'KW prototype measurement framework' included: (W-3-1) immediate user surveys (happy sheets); (W-3-2) post-event surveys and/or interviews; and (W-3-3) generic business improvement surveys such as employee and customer surveys;</p> <p>(W-4) A review of the 'current impact and health of CoP's was undertaken by Richard McDermott in</p>
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		<p>early 2005. Later annual CoP reviews were initiated in February 2006;</p> <p>(W-5) In 2007 the KAs concluded ‘if what the KAs did hit roughly on KW everyone was happy’. The KAs ‘played the game’ by ‘sometimes [...] identifying KA activities post-hoc i.e. things were found to fit the role’;</p>
<p>KW Director decision (X) to change labelling of KW teams to clarify what the KW team did in February 2006.</p>	<p>(X-a) Discussion with a group of KAs at a KW workshop (arranged by the KW Director to discuss the KW survey results) mentioned need to clarify what KW was about: organisational learning, information management?</p> <p>(X-b) HQ Senior Management were reviewing various HQ business support services in early 2006 ‘to realign a range of support services across [PuSA]’.</p>	<p>(X-1) Change in labelling of KW teams from: change and communications, tacit, explicit, and metadata to: (X-1-1) organisational learning; and (X-1-2) information management.</p>
<p>Key decisions (or groups of decisions) made in each episode of the outcomes phase</p>	<p>Contextual/facilitating factors influencing decision-making in each episode of the outcomes phase (2006 onwards)</p>	<p>Consequences of contextual/facilitating factors and decisions made in each episode of the outcomes phase (2006 onwards)</p>

(2006 onwards)		
REJECTION DECISIONS LEADING TO DISCONTINUANCE EPISODE (2006)		
<p>HQ Senior Management and KW Director decisions (Y) to discontinue current KW operating model in 2006.</p>	<p>(Y-a) A review of the 'current impact and health of CoP's was undertaken by Richard McDermott in early 2005. Later annual CoP reviews were initiated in February 2006 by the KW Team;</p> <p>(Y-b) HQ CEO 3 undertook a review of PuSA's operations in June 2004 and initiated a 'Business Improvement' Programme 3 in July 2004. During the BI Programme PuSA's operating model was reviewed as this was one area which was not addressed during the BT Programme 2;</p> <p>(Y-c) An annual assessment conducted by the KW Team in 2006 found that respondents thought the KW CoP had lost its focus and direction. It had not matured over the past three years.</p>	<p>(Y-1) The KW Team was disbanded in August 2006. The KW Team's 'organisational learning' and 'information management' teams were included in a new Corporate Services Directorate (including other support functions such as Business Improvement, HR and ICT);</p> <p>(Y-2) The KW CoP was disbanded in December 2006.</p>
<p>HQ Senior Management, Organisational Learning, and</p>	<p>(Z-a) Change in labelling of KW teams from change and communications, tacit, explicit, and metadata to organisational learning and information management – <i>see consequence (Z-1)</i>.</p>	<p>(Z-1) Intranet screenshots show that after January 2007 KW labelling was discontinued. Instead, the terms 'organisational learning' and 'information management' were used.</p>

<p>Information Management Teams decision (Z) to discontinue use of KW label.</p>		
<p>DECISIONS TO CONTINUE ADOPTION LEADING TO ROUTINISATION EPISODE (2006)</p>		
<p>Subsidiary senior management decision (AA) to continue adopting KW in subsidiaries.</p>	<p>(AA-a) The KW Team drafted a KW survey questionnaire that was emailed to subsidiary management (CEO's, Directors and KA line managers) and Knowledge Analysts in September 2007;</p> <p>(AA-b) The outcome of the survey was KW Director recommendation to subsidiary senior management to:</p> <p>(AA-b-1) commit time and resources to KW activities; and (AA-b-2) agree KW priorities at PuSA and subsidiary levels.</p>	<p>(AA-2) KW subsidiary senior management submitted KW priorities to the KW team. This demonstrates a commitment to continue adopting and routinise KW in subsidiaries – see <i>facilitating factor (AA-b-2)</i>.</p>
<p>HQ Senior Management decision (BB) to continue adopting KW in PuSA.</p>	<p>(BB-a) HQ CEO 3 undertook a review of PuSA's operations in June 2004 and initiated a 'Business Improvement' Programme 3 in July 2004. During Business Improvement Programme 3 PuSA's</p>	<p>(BB-1) The newly relabelled 'organisational learning' and 'information management' teams were included in a new Corporate Services Directorate (including other support functions such as Business</p>

	<p>operating model was reviewed: this was one area which was not addressed during Business Transformation Programme 3.</p>	<p>Improvement, HR and ICT). The organisational learning team became a stand-alone team. The information management team was subsumed into a newly formed 'information services' team that would become a 'one stop shop for all business demands related to information'.</p>
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7 CHAPTER 7: DISCUSSION

7.1 Introduction

This chapter discusses new theoretical insight about the process of adoption of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature review Chapter 2. The discussion here aims to address the main research question in the introductory Chapter 1: *what is the process of adoption of management innovation in an organisational setting?* To answer this question two ancillary sets of questions were identified. Another third, and final, set of questions considers the practical value of the research outputs.

The body of this discussion chapter, therefore, is divided into three sections.

- The first section addresses three research questions (RQs 1-3) relating to *attributes* of management innovation. These questions relate to: the characteristics of management innovation (RQ 1); and internal and external factors that influence the process of *adoption* of management innovation (RQs 2 & 3);
- The next section focuses on four research questions (RQs 4-7) relating to *phases and episodes* in the process of *adoption* of management innovation. The questions here relate to: phases and episodes in this process (RQ 4); key decision-points and options within each phase (RQ 5); the sequence of phases and episodes in this process (RQ 6); and the similarities and differences between the process of *generation* and *adoption* of management innovation (RQ 7);
- The third, and final, section concentrates on two research questions (RQs 8-9) exploring the *practical value* of the research outputs. The first question is concerned with the extent to which the process of adoption can be modelled for practical use (RQ 8). The second question centres on lessons that can be learned from this particular study (RQ 9).

7.2 Questions related to the attributes of management innovation

This first section discusses theoretical insight about the *attributes* of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature evaluation Chapter 2. The discussion here relates to three research questions (RQs 1-3).

7.2.1 The characteristics of management innovation (RQ 1)

In the evaluation of literature in section 2.2.1 on page 13 in Chapter 2 four main characteristics of management innovation are detailed. In short, it: (1) exhibits novelty; (2) shows evidence of implementation; (3) intended to further organisational goals or enhance performance; and (4) alters the way managerial work is performed (Birkinshaw, Hamel & Mol, 2005; Mol & Birkinshaw, 2008). The literature reviewed in section 2.2.2 on pages 16-20 shows that Knowledge Management meets all the criteria above. It can therefore be conceived as a management innovation. The analysis Chapters 4, 5 and 6 investigating the adoption of a Knowledge Management programme labelled 'Knowledge Working' confirms this. PuSA was thus a good site for material collection and data analysis.

The literature in Chapter 2 identified two types of implementation: (1) trial experimentation with a few potential users or (2) full roll-out to all potential users (see Table 2–5 on page 54). In analysis Chapter 5 an additional third type of implementation labelled 'ad-hoc implementation' was discovered. In PuSA ad-hoc implementation occurred due to local conditions in the case study organisation. The reason ad-hoc implementation occurred was the lack of integration of many KW tools in PuSA's mechanistic coordinating controls that sought to standardise work processes (see Table 2–7 on page 61 in Chapter 2 for mechanisms used to coordinate work in a 'Machine Bureaucracy' organisational structure). This finding illustrates the importance of incorporating Knowledge Management tools into the mechanistic coordinating controls (systems, processes, policies, and procedures) of bureaucratic organisations

where there is a high degree of formalisation (many formal rules and regulations). As the evaluation of literature in section 2.5.1 on page 60 in Chapter 2 reveals, a high degree of formalisation is an attribute of bureaucratic organisations (Rogers, 2003).

7.2.2 The influence of internal factors on the process of adoption of management innovation (RQ 2)

The internal factors that influence the adoption of management innovation are identified in the literature evaluation in section 2.5 on page 60 in Chapter 2. These internal factors include: (1) the organisational setting; (2) internal networks; (3) power and conflict; and (4) the ambition for change. These four internal factors are exemplified in the case study presented in Chapters 4, 5 and 6.

Of particular methodological significance is the identification of four discourses: a 'fiefdom' and 'one network' discourse at pan-organisational level and a corresponding 'local delivery' and 'network delivery' at subsidiary level (see Table 3–1 on page 85 in Chapter 4). This study reveals the power of discourse that represents both formal (Rogers, 2001) and informal (Giddens, 1984) organisational structure. The 'one network' discourse, in particular, was representative of the ambition (or agenda) for informal and formal structural change in PuSA between 1999 and 2008. The analysis in Chapters 4, 5 and 6 was able to trace the influence of internal factors (for example, compatibility between management innovation, organisational structure, and ambition for organisational change) on the adoption of management innovation through the examination of these four discourses.

The summary of empirical findings in Table 6–2 on page 249 in Chapter 4 illustrates that HQ Senior Managers and the KW Team both failed to consider: (1) whether the initial ‘one network’ KW tools selected (CoPs, intranet and k-packs) could be modified to suit ‘local delivery’; (2) whether the ‘one network’ KW diagnostic tools were suited to ‘local delivery’ agenda-setting; (3) whether the nature of ‘one network’ KW task force work would suit ‘local delivery’; and (4) whether ‘fiefdom’ norms of resource allocation would cause problems in the ‘local delivery’ of Knowledge Working. This mismatch (or incompatibility) in discourses contributed to the increased ‘complexity’ (Rogers, 2003) in implementing Knowledge Working in the implementation phase of adoption. The analysis in Chapter 5 highlights that modifications introduced, and problems that occurred in operationalising and clarifying/confirming management innovation, were due to incompatibility between discourses.

Another significant finding relates to the suppression of conflict. The literature evaluation in section 2.5.3 on page 65 in Chapter 2 shows the different ways that conflict is suppressed through communication (Deetz, 2007). One way of suppressing conflict is through pacification, which according to Deetz (2007 p. 465) is the ‘process by which conflictual discussion is diverted or subverted through an apparently reasonable attempt to engage with it’. The analysis in Chapter 4 found that pacification extended beyond communication in PuSA. Pacification resulted in the approval of a *formal* organisational structure (labelled ‘operating model’) in PuSA. This attempt to pacify subsidiary senior management resulted in a significant ‘turning-point’ (LeGreco and Tracy, 2009 p. 1523) in the adoption of Knowledge Working. The analysis in Chapter 5 illustrates how subsidiary senior management exercised their delegated authority to adopt Knowledge Working to suit ‘local delivery’ circumstances. The suppression of conflict through pacification in the initiation phase thus caused conflict in the implementation phase.

The analysis in Chapters 4, 5 and 6 found that organisational structure (both formal and informal) had the biggest impact on the adoption of Knowledge Working in PuSA. Although this finding is not specific to the adoption of management innovation per se, it is of relevance to the adoption of Knowledge Management. This finding illustrates the importance of considering *informal* organisational structure (labelled 'culture' in the Knowledge Management literature) when choosing a *formal* organisational structure for a task force.

7.2.3 The influence of external factors on the process of adoption of management innovation (RQ 3)

In literature evaluation Chapter 2, two external factors were identified that influence the adoption of management innovation (see section 2.5 on page 60). This includes: (1) external networks; and (2) power and conflict. The literature in section 2.5.2 on page 64 in Chapter 2 identifies four external networks (cultural, regulatory, industry, and political) that have an influence on different strategies of adoption of innovation (in general) in organisational settings. The analysis in Chapters 4, 5 and 6 has been able to establish the relative importance of these external networks on the process of adoption of management innovation.

The political network, as found in Chapters 4 and 6, had an indirect role to play on the adoption of Knowledge Working in PuSA. The analysis in Chapter 4 confirms the role of the political network in issuing political directives (in PuSA's case, the 1999 UK Modernising Government initiative) that leads to a political strategy of adoption of organisational change (see the evaluation of literature in section 2.5.2 on page 64 in Chapter 2). This political directive motivated HQ Senior Management to adopt Business Transformation Programme 2, comprising many innovations (including Knowledge Working) between 2000 and 2008.

The analysis in Chapters 4 shows that the cultural network played a direct role in the knowledge/research episode and the matching episode in the initiation phase of Knowledge Working. The analysis in Chapter 4 confirms the role of the cultural circuit in identifying practices organisations can imitate leading to a mimetic strategy of adoption (see the evaluation of literature in section 2.5.2 on page 64 in Chapter 2). Later, as described in Chapter 5, a member of the cultural network was commissioned to jointly develop a consultancy process for the Knowledge Analysts to follow to support 'local delivery' of Knowledge Working. This illustrates the cultural networks involvement in generating processes that organisations can adopt.

Neither the regulatory network nor the industry network had any role to play in the adoption of Knowledge Working in PuSA. A review of the Knowledge management literature suggests this is because PuSA was an 'early adopter' (Rogers, 2003 p. 279) of Knowledge Management in the public sector in 2000. A more recent study of eleven public sector organisations conducted by Morton and Lacey (2006 p.7), however, found that Knowledge Management Programmes were initiated 'almost always as a result of external criticism from the Audit Commission'. Their research suggests that the regulatory network has a role to play in regulating an organisations operations leading to a coercive strategy of adoption, where Knowledge Management is perceived to be an established public sector practice.

7.3 Questions related to phases and episodes in the process of adoption

In this second section theoretical insight about *phases and episodes* in the process of adoption of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature evaluation Chapter 2 is discussed. The discussion here relates to four research questions (RQs 4-7).

7.3.1 The phases and episodes in the process of adoption of management innovation (RQ 4)

The evaluation of literature in section 2.3.1 on pages 24-29 in Chapter 2 found that there is no agreed number of phases in the process of adoption of innovation (in general). In the innovation literature Rogers (2003) innovation-adoption model has two phases: initiation and implementation (routinisation is an episode within the implementation phase). The Knowledge Management literature, however, adds a third phase labelled 'institutionalisation' (for example, Chua & Lam, 2005; Lin, 2014). The findings of the empirical study in Chapters 4, 5 and 6 establishes that there are three distinct phases (initiation, implementation, and outcomes) in the process of adoption of management innovation. These phases are distinct because formal decisions were identified in PuSA that marks the transition between the initiation and implementation phase in Chapter 4 and the implementation and outcomes phase in Chapter 6.

This study makes a contribution to the 'outcomes' labelling of the third phase of the process of adoption of management innovation. The empirical research in Chapter 6 found that the process of adoption of management innovation can include two outcomes: (1) routinisation (labelled 'institutionalisation' in the Knowledge Management literature); and (2) discontinuance. The analysis in Chapter 6 determined that discontinuance occurred due to 'dissatisfaction with performance' (Rogers, 2003) and the introduction of further formal structural changes by another HQ CEO 3 recruited in February 2004. Rogers (2003) discussed these outcomes in relation to the innovation-decision model, but only 'routinisation' appears in his innovation-adoption model (see Figure 2–3 on

page 52 in Chapter 2). A discontinuance episode is not included in the two *generation*-models of management innovation (see a description of the episodes in these models in Table 2–3 on page 31 in Chapter 2). The reason this episode is not included in models of innovation (in general) is because it is not politically correct to consider failure as an option. This ‘pro-innovation bias’ has been observed in the innovation literature (Rogers, 2003 p. 106) and in the Knowledge Management literature (Hall & Goody, 2007).

All episodes in the research framework (see Figure 3–7 on page 133 in Chapter 3) were identified in the empirical study in Chapters 4, 5 and 6. The empirical study has found two significant findings related to the agenda-setting and knowledge/research episodes. These will be discussed below.

In the innovation literature (Rogers, 2003 p. 422) and management innovation literature (Birkinshaw & Mol, 2006) the external search for new innovative ideas is problem-driven. In other words, inspiration is sought for new innovative ideas that can be developed further to address pre-existing organisational needs/problems. The analysis in Chapter 4, however, found that in the process of adoption the search was also opportunity-driven. The outputs of the initial search for new management ideas were compared against structures and operations to identify organisational areas to improve on. It was through this comparison, and not before, that an organisational ‘performance gap’ (Rogers, 2003 p. 422) was identified. This finding illustrates that the external search for inspiration for new managerial ideas in the process of *adoption* can be either: (1) opportunity-driven to address potential organisational needs/problems or (2) problem-driven to address current organisational needs/problems.

In the innovation literature Rogers (2003 p.171) discusses whether an individual's needs or awareness of an innovation come first in the innovation decision-model. The analysis in Chapter 4 found that the agenda-setting and knowledge/research episodes are recursive. In the agenda-setting episode in PuSA a general organisational need/problem was identified. This motivated an external search for inspiration for a new (albeit pre-existing) managerial ideas that could address the need for 'knowledge sharing' and 'one network' working. This external search was originally restricted to Knowledge Management, but this was extended to include other ideas for pan-organisational working. It was through this extended search that additional opportunities were identified, which resulted in the identification of more specific organisational needs/problems to address. This recursive cycle of agenda-setting and knowledge/research is not depicted in Rogers (2003) innovation-adoption model but discussed in relation to the innovation-decision model.

7.3.2 Key decision-points and options within each phase of the process of adoption of management innovation (RQ 5)

Decision-making is discussed in the literature across all phases and episodes (see section 2.4 on page 51 in Chapter 2). The different decisions types (types of decisions-between-alternatives; adoption/rejection decision types; modification decision types; and rejection decision-types) are exemplified in the empirical work presented in Chapters 4, 5 and 6.

The decision-types anticipated to appear across the process of adoption of management innovation (see Table 2–6 on page 58) are compared to the decision-types found in PuSA. The decision types highlighted in bold and grey in Table 7–1 on page 285 refer to the decision types that occurred in the analysis Chapters 4, 5 and 6.

Table 7–1: Comparing types of decisions found in the literature evaluation in Chapter 2 and empirical analysis (in bold and grey) in Chapters 4, 5 and 6

	Types of decisions-between-alternatives		Adoption/rejection decision types (Rogers, 2003)				Modification decision types (Mamman, 2002; 2009)				Rejection decision types (Rogers, 2003)			
	Adoption or rejection	Other decision types	Authority	Optional	Collective	Contingent	Addition	Omission	Substitution	Hybridisation	Passive rejection	Active rejection	Reversal rejection	Discontinue adoption
Anticipated episodes in the process of adoption of management innovation, and transition points between phases.														
Agenda-setting	✓	✓	✓	✓	✓						✓			
Knowledge/ research	✓		✓	✓	✓	✓					✓			
Matching	✓	✓	✓	✓	✓	✓	✓					✓		
Persuasion	✓		✓	✓	✓	✓						✓		
<i>Transition between phases</i>	✓		✓	✓	✓	✓								
Modification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Operationalisation	✓	✓	✓	✓	✓	✓					✓	✓	✓	

Clarification/ confirmation	✓	✓	✓	✓	✓	✓								✓
<i>Transition between phases</i>	✓		✓	✓	✓	✓								
Routinisation	✓		✓	✓	✓	✓								
Discontinuation	✓	✓	✓	✓	✓	✓								✓

Source: original

The literature evaluation in Chapter 2 on page 11 found that there will be three points at which 'decisions-between-alternatives' take place in the process of adoption of management innovation: (1) a decision marking a transition between three phases (initiation, implementation, and outcomes); (2) decisions within episodes in each phase; and (3) a decision marking a transition between discontinuance and routinisation episodes. Decision-points (1) and (2) are represented in the case study presented in Chapters 4, 5 and 6. The third, however, was not. As explained in Chapter 6 the timeframe of the empirical study was not long enough to establish whether a decision can be made to discontinue a management innovation after routinisation has occurred. Rogers (2003 p. 178) work, however, does support this. In conclusion, the three decision-points mentioned earlier are likely to occur in the process of management innovation.

To date no attempt has been made to model decision-making for the process of *adoption* of management innovation (in general) or Knowledge Management. A significant contribution of this study is the development of a model that includes decision-making across phases, and 'decisions-between-alternatives' within the agenda-setting and matching episodes of the initiation phase of the process of adoption of management innovation. See Table 7-3 page 290. Recommendations for decision-making in the implementation and outcomes phases are also included in this model. These recommendations are based on findings in the literature in Chapter 2 and empirical study in Chapters 4, 5, and 6. This model could be used as an aid to decision-making within the process of adoption of management innovation because it makes explicit choices in decision-making that have an influence on the adoption of management innovation in an organisational setting.

Four groups of compatible (or interrelated) 'decisions-between-alternatives' have been identified from the literature in Chapter 2 and findings from the empirical study in Chapters 4, 5 and 6. These decisions are grouped together in Table 7–2 on page 289. They are also colour-coded in the model of decision-making in Table 7–3 on page 290. These groups of decisions draw attention to compatible decisions that may reduce complexity, and avoid problems, in adopting management innovations in organisational settings.

Table 7–2: Four groups of compatible decisions-between-alternatives

Four groups of decisions-between-alternatives	Decisions-between-alternatives at a general management innovation and task force level	Type of decisions-between-alternatives within these four groups (for a more detailed description see Table 7–6).
Group 1	Management innovation	Aim of management innovation Depth of organisational change
	Task force	Mandate of the task force
Group 2	Management innovation	Extent of organisational change Direction of organisational change Approach to management innovation Degree of modifiability of management innovation
	Task force	Location of the task force Management of task force Approach of the task force
Group 3	Management innovation	Strategy of management innovation Participation in management innovation adoption Resources required to adopt management innovation

	Task force	Competence of the task force
Group 4	Management innovation	Participation in management innovation adoption Operationalisation of management innovation

Source: original

Table 7–3: A model of decision-making across the process of adoption of management innovation

Phases in the process of adoption of management innovation	Episodes in the process of adoption of management innovation	Attributes of decision-making		Decision-between-alternatives (and/or decisions) for management innovation. Recommendations from the literature (Currie, 1991; BSI, 2005) is highlighted in bold.	
Initiation (Phase 1)	Agenda-setting	Agenda for organisational change:	Aim of management innovation:	To further organisational goals (for example, facilitate organisational change)	To enhance firm performance (for example, improve organisational impacts)
		Nature of organisational change:	Depth of organisational change:	Conceptual (deep) affecting organisational culture	Practical (shallow) affecting organisational practices
	Selection/ Matching		Extent of organisational change:	Broad across all organisational functions	Narrow within one or more (but not all) organisational functions
			Direction of	Top-down direction	Bottom-up direction

			organisational change:	of change from experts to local users	of change from local users to peers
	Type of adoption of management innovation:	Strategy of management innovation:		Personalisation (people focused) strategy	Codification (technology focused) strategy
		Approach to management innovation adoption:		Push innovation-centred approach focusing on identifying needs/problems of potential users of an available innovation	Pull problem-centred approach focusing on identifying local needs/problems to address through a potential management innovation
	Nature of adoption of management innovation:	Participation in management innovation adoption:		Mandatory where participants do not have a choice to adopt or reject a management innovation	Voluntary where participants have a choice to adopt or reject a management innovation

			Degree of modifiability of management innovation:	Ductile management innovations that can extend vertically across organisational hierarchy	Malleable management innovations that can extend horizontally across organisational boundaries
			Operationalisation of management innovation:	Trial experimentation with a few potential users first	Full roll-out to all potential users
		Means of implementing management innovation:	Resources required to adopt management innovation:	Using a task force to operationalise management innovation	Using individuals or groups of people who may not require specialist skills to operationalise management innovation
Decisions-between-alternatives (and/or decisions) for task forces. These task force decisions are contingent on management innovation decisions.					
		Implementing	Location of task	Staff are co-located in	Staff are distributed

		task force resources:	force	a single team in one location	across the organisation in different locations
			Management of task force	Centralised management by a single central unit	Management decentralised to local adopting units
			Competence of task force	Staff have technical skills	Staff have social skills
			Mandate of task force	A mandate that is recreated and continuously changes	A mandate that is static and does not change
			Approach of task force	Service approach: initiate management innovation activities in conjunction with staff, develop and pilot them, then transfer ownership to staff members for	Co-ordination approach: coordinate the implementation of management innovation activities, including those chosen, owned and maintained by staff

				delivery and maintenance	located in different functions or locations.
Please note: decision-making recommendations in episodes below are based on findings in the literature in Chapter 2 and empirical study in Chapters 4, 5, and 6.					
	Persuasion/validation	It is recommended that decisions to favour adoption or rejection of management innovation is contingent on: (1) the compatibility of decisions made in the agenda-setting and selection/matching episodes of the initiation phase; and (2) the compatibility between: (a) management innovation; aim (or agenda) for organisational change; and informal/formal organisational structures; and (3) the degree to which the management innovation receives internal/external validation.			
Implementa- tion (Phase 2)	Modification	It is recommended that the decision to modify management innovation and/or informal/formal organisational structures (or not) is contingent on: (1) the degree of modifiability of management innovation; and (2) the compatibility between: (a) management innovation; (b) aim (or agenda) for organisational change; and (c) informal/formal organisational structures.			
	Operationalisa- tion	It is recommended that the decision to operationalise management innovation (or not) is contingent on: (1) the compatibility of decisions in the agenda-setting and selection/matching episodes of the initiation phase; and (2) the compatibility between: (a) management innovation; (b) aim (or agenda) for organisational change; and (c)			

		informal/formal organisational structures following modification (if required).
	Clarification/ confirmation	It is recommended decisions on how to clarify/theorise (or make sense of) and confirm/validate management innovation is contingent on all other decisions made in the agenda-setting and selection/matching episodes in the initiation phase.
Outcomes (Phase 3)	Routinisation	It is recommended that the decision to continue adoption (or not) is contingent on: (1) findings in the clarification/confirmation episode in the implementation phase; or (2) the discovery of a replacement management innovation perceived to be suitable to address the managerial need, problem or opportunity in question.
	Discontinuation	

Source: original

7.3.3 The extent to which the sequence of phases and episodes in the process of adoption of a management innovation are linear or non-linear (RQ 6)

In the literature in Chapter 2 there is broad consensus that the process of innovation (in general) is non-linear (see section 2.3.1 on page 24). The findings from the empirical study, however, suggests that phases and episodes have to be considered separately to determine their sequence in the process of adoption of management innovation.

In the literature evaluation Chapter 2 (see section 2.3.1 on page 24) it is reported that researchers who study the adoption process have focused on decision-making to explain the transition between episodes (for example, Rogers, 2003). Table 7–4 shows the sequence of phases and episodes in the process of adoption of Knowledge Working in PuSA, derived from an analysis of coding on the chronological timeline in Appendix A. The findings in this table reveal that: (1) the phases are linear but may overlap; and (2) the episodes, in contrast, are non-linear and may occur in parallel. Researchers have not explored the process of adoption of innovation (in general) in sufficient depth to generate these findings.

Table 7–4: The sequence of phases and episodes in the process of adoption of Knowledge Working in PuSA

Phases between April 1999 and February 2007		Initiation (Phase 1: April 1999 to November 2002)				Implementation (Phase 2: November 2002 to October 2006)				Outcomes (Phase 3: from October 2006)
	Episodes	1999	2000	2001	2002	2003	2004	2005	2006	2007
Initiation (Phase 1)	Agenda-setting	✓	✓	✓	✓	✓	✓	✓		
	Knowledge/research		✓	✓	✓	✓	✓	✓	✓	
	Matching				✓	✓	✓	✓	✓	
	Persuasion	✓	✓	✓	✓	✓				
<i>An adoption decision: a transition between phases</i>					✓					
Implementation (Phase 2)	Modification					✓	✓	✓	✓	
	Operationalisation			✓	✓	✓	✓	✓	✓	✓
	Clarification/confirmation				✓	✓	✓	✓	✓	
<i>An adoption decision: a transition between phases</i>									✓	
(Outcomes Phase 3)	Routinisation								✓	✓
	Discontinuance								✓	

Source: original

7.3.4 How is the process of adoption similar and/or different from the process of generation of management innovation? (RQ 7)

In the literature evaluation Chapter 2 a number similarities and differences between the process of *generation* and the process of *adoption* of innovation (in general) have been identified. Table 7–5 shows that there are two similarities and five differences between the process of adoption and generation of innovation (in general). The empirical study reported in Chapters 4, 5 and 5 confirms that the process of adoption of management innovation exhibits the same characteristics of the process of adoption of innovation (in general) reported in the literature evaluation in Chapter 2.

Table 7–5: Similarities and differences in the process of generation and adoption of management innovation

	Characteristics of innovation process in the literature	Process of <i>generation</i> of innovation (in general)	Literature on the process of generation of management innovation	Process of <i>adoption</i> of innovation (in general)	Empirical evidence of the process of adoption of management innovation in PuSA
Similarities	Level of analysis	organisation	✓	organisation	✓
	Sequence of process	non-linear	✓	non-linear	✓
Differences	Type of process	creative	✓	problem-solving	✓
	Degree of novelty	entirely unique	✓	significantly novel	✓
	Phases/episodes	episodes only	✓	phases and episodes	✓
	Outcome	unique innovation	✓	organisational change	✓
	Transition between episodes	department/activity	?	decision	✓

Source: original

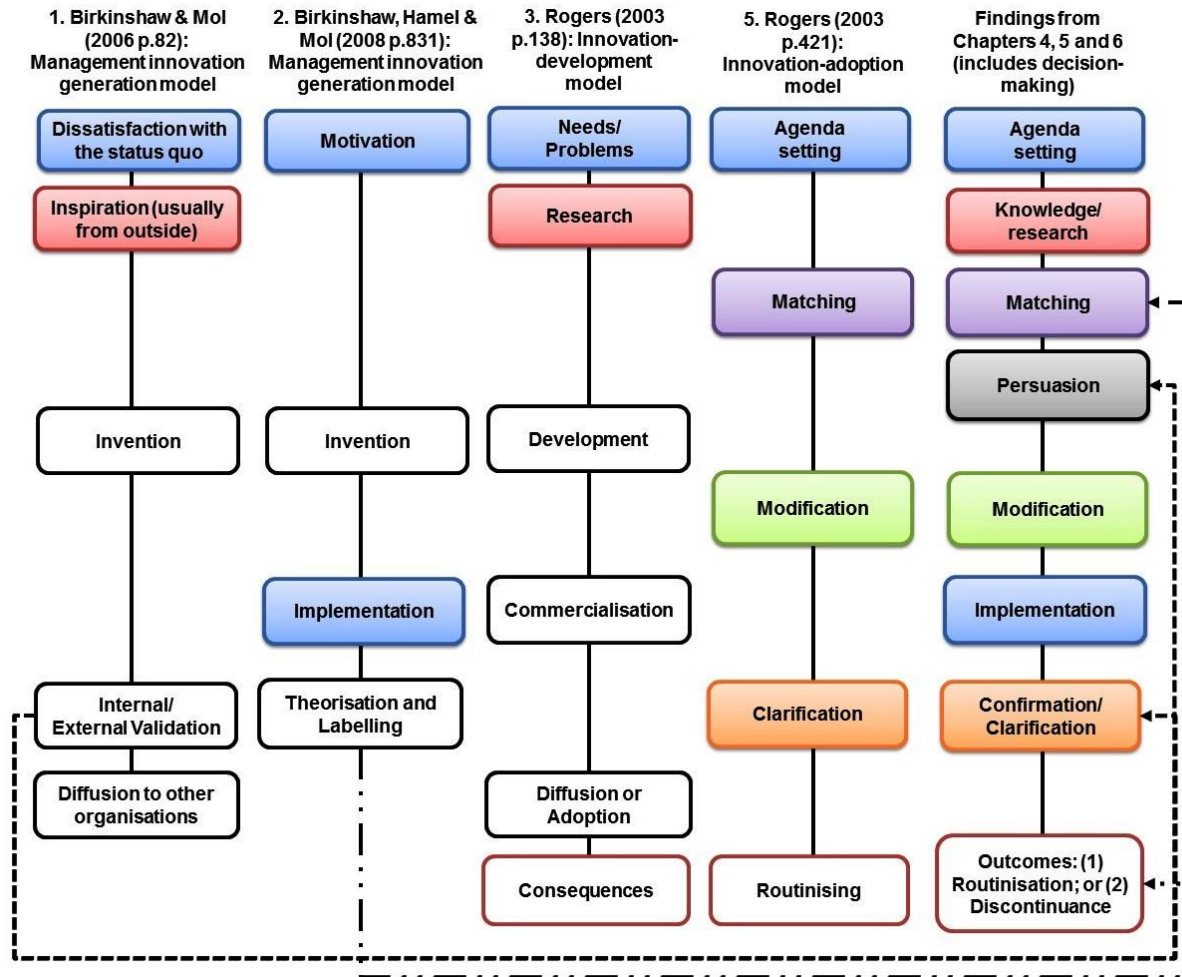
To determine the similarities and differences in episodes of models of adoption in generation, the findings from the analysis in Chapters 4, 5 and 6 are compared against models chosen for comparison in Chapter 2 (see Figure 2–2 on page 43). In Figure 2–2 episodes that are similar are colour-coded. This illustrates that: (1) the ‘external/internal validation’ episode in Birkinshaw and Mol’s (2006) generation model of management innovation; and the (2) ‘theorisation and labelling’ episode in Birkinshaw et al’s (2008) generation-model are not distinct episodes in the process of adoption of management innovation.

In the literature evaluation Chapter 2, Table 2–3 on page 31 shows that external and internal validation is sought to support the *generation* of management innovations (Birkinshaw & Mol, 2006). The findings of Chapters 4 and 5 found that external/internal validation took place in two episodes: (1) the persuasion episode in the initiation phase; and (2) the clarification/confirmation episode in the implementation phase). The purpose of external/internal validation was: (1) to help staff form a favourable attitude (or persuasion) to the adoption of management innovation in the persuasion episode of the initiation phase; and (2) to build the legitimacy of management innovation in the clarification/confirmation episode in the implementation phase to support the decision to continue adoption.

Another finding is that theorisation and labelling is not a distinct episode in the process of *adoption* of management innovation. The analysis in Chapters 4 and 6 show that labelling played a naming role in PuSA: it was used to refer to directorates and teams on the formal organisational chart. In 2001 ‘Knowledge Working’ labelling was introduced in the matching episode as ‘Knowledge Management’ labelling was already prefixed to a ‘KM’ Directorate that appeared on a formal organisational chart. The KW label was prefixed to a ‘KW’ Team. In the clarification/confirmation episode in the implementation two new labels ‘Organisation Learning’ and ‘Information Management’ replaced the label ‘Knowledge Working’. These labels were compatible with the establishment of a new HQ Directorate and business support functions in the routinisation phase. Moreover, in the practitioner literature it is stated that ‘there is a balance of

opinion as to whether 'Knowledge Management' as a distinct term helps or hinders its adoption in the public sector' (BSI, 2005 p. 72). The analysis in Chapters 4 and 5 also shows that theorisation (or sense-making) occurred in different phases and episodes across the process of adoption to build a rationale for the initial and continued adoption of management innovation in PuSA.

Figure 7–1: Similarities and differences in generation and adoption models



Source: original

7.4 Questions related to practical value of the research outputs

This third, and final section, considers the practical value of research outputs gained from the analysis of Chapters 4, 5, and 6 and the literature evaluation Chapter 2. The discussion here relates to the final two research questions (RQs 8 & 9).

7.4.1 The extent to which the process of adoption of a management innovation be modelled for practical use (RQ 6)

A combined adoption-decision-model (see Figure 7–2) has been developed from the findings of the literature evaluation in Chapter 2, the empirical work in Chapters 4, 5 and 6, and theoretical insight gained in this Chapter 7.

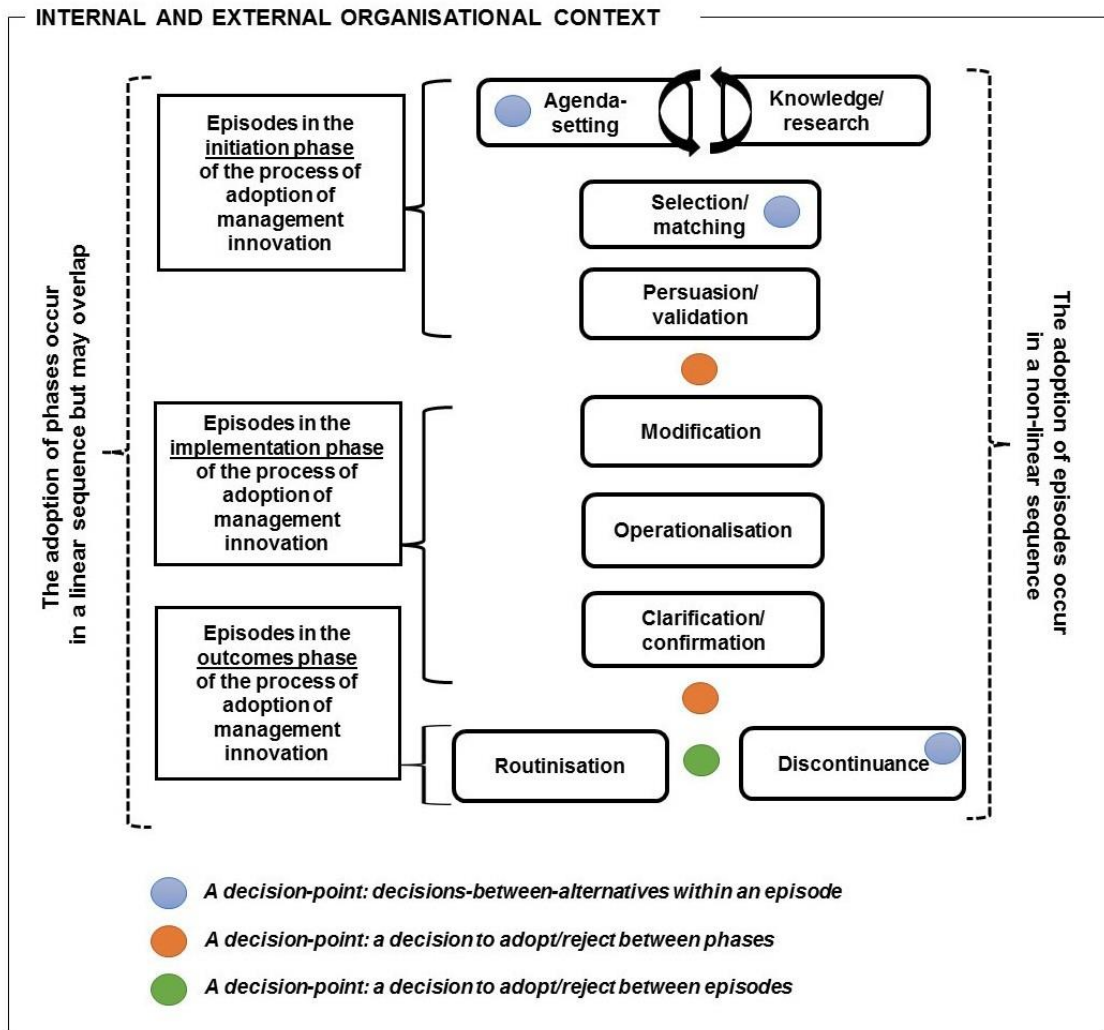
This combined adoption-decision-model has three phases (initiation, implementation, and outcomes) that are sequential but may overlap. Each phase contains non-linear episodes that may run in parallel (see section 7.3.3 on page 297):

- The first phase, initiation, has four episodes: agenda-setting; knowledge/research; selection/matching and persuasion/validation. The agenda-setting and knowledge/research episodes may be recursive;
- The second implementation phase has three episodes: modification; operationalisation; and confirmation/clarification;
- The final phase, outcomes, results in either a routinisation episode or discontinuation episode (see discussion in section 7.3.2 on page 284);
- A description of these episodes can be seen in Table 7–6 on page 307. These descriptions are based on the content of innovation models compared in Table 2–3 on page 31 in Chapter 2 and the analysis Chapters 4, 5 and 6.

Although all these *adoption* episodes were observed in the empirical study in Chapter 4, 5 and 6, it is anticipated that not all adoption episodes will appear in every process of *adoption* of management innovation. The possibility that some episodes will be omitted has been acknowledged in the innovation (Rogers, 2003) and management innovation literature (Birkinshaw et al, 2008) relating to the *generation* process.

In this model additional labels are added to two episodes in the initiation phase to reflect findings in Chapter 4. The label 'selection' is added to 'matching' to form a new label 'selection/matching' as management innovations in PuSA were selected that matched the agenda for organisational change. The label 'validation' is added to 'persuasion' to form a new label 'persuasion/validation'. Birkinshaw and Mol's (2006) research found that external and/or internal validation has a direct role in helping people form a favourable attitude (persuasion) to the *generation* of a new management innovation. The analysis in Chapter 5 also found that external and/or internal validation has a supporting role in the clarification/confirmation episode. Validation was sought during the clarification/confirmation episode to support the decision to continue adopting Knowledge Working in PuSA.

Figure 7–2: A management innovation adoption-decision model



Source: original

Table 7–6: A description of the episodes in the model of the adoption of management innovation

Phases	Terms used as labels for episodes	A description of the episodes in each phase of the process of adoption of management innovation.
Initiation (Phase 1)	Agenda-setting	Agenda-setting involves setting an agenda for change by defining an organisational problem, need, or opportunity that motivates individual/s to consider adopting their own management innovation.
	Knowledge/ research	Knowledge/research involves: (1) becoming aware of new management innovations serendipitously; or (2) undertaking internal/external planned research to: (a) identify organisational problems, needs, or opportunities that potential management innovations can address; and/or (b) seeking inspiration for new management innovations (including gaining knowledge of the aims, nature and means of management innovation) that can address current or potential organisational problems, needs, or opportunities.
	Selection/ matching	Selection/matching involves: (1) selecting a management innovation infrastructure that matches (is compatible with) the agenda for organisational agenda; (2) planning and designing the match between management innovation and existing/desired organisational structures (informal and/or

		formal), or vice versa; and (3) anticipating the enablers and barriers to implementation.
	Persuasion/ validation	Persuasion/validation involves seeking and/or generating external and internal validation to help persuade individual/s (form a favourable attitude) to adopt management innovation.
Implementation (Phase 2)	Modification	Modification involves modifying the infrastructure for management innovation to accommodate: (1) the agenda for organisational change; and (2) existing/desired organisational structures (informal and/or formal), and vice versa.
	Operationalisation	Operationalisation includes putting a management innovation into use for the first time either by: (1) trial experimentation with a few users; or (2) full roll out to all users.
	Clarification/ confirmation	Clarification/confirmation involves: (1) clarifying/theorising (or making sense of) the relationship between management innovation and organisational structures (informal and/or formal); and (2) seeking confirmation/validation for continued adoption.

Outcomes (Phase 3)	Routinisation	Routinisation involves continuing the adoption of management innovation so that it becomes an ongoing element in organisational activities, and is now seen as a standard/routine working practice.
	Discontinuance	Discontinuance involves either: (1) replacing a management innovation with a better idea; or (2) ceasing adoption due to disenchantment/dissatisfaction with performance.

Source: developed from Table 2–3: A description of episodes as they appear in the literature on page 31 in Chapter 2 and empirical research reported in Chapters 4, 5 and 6.

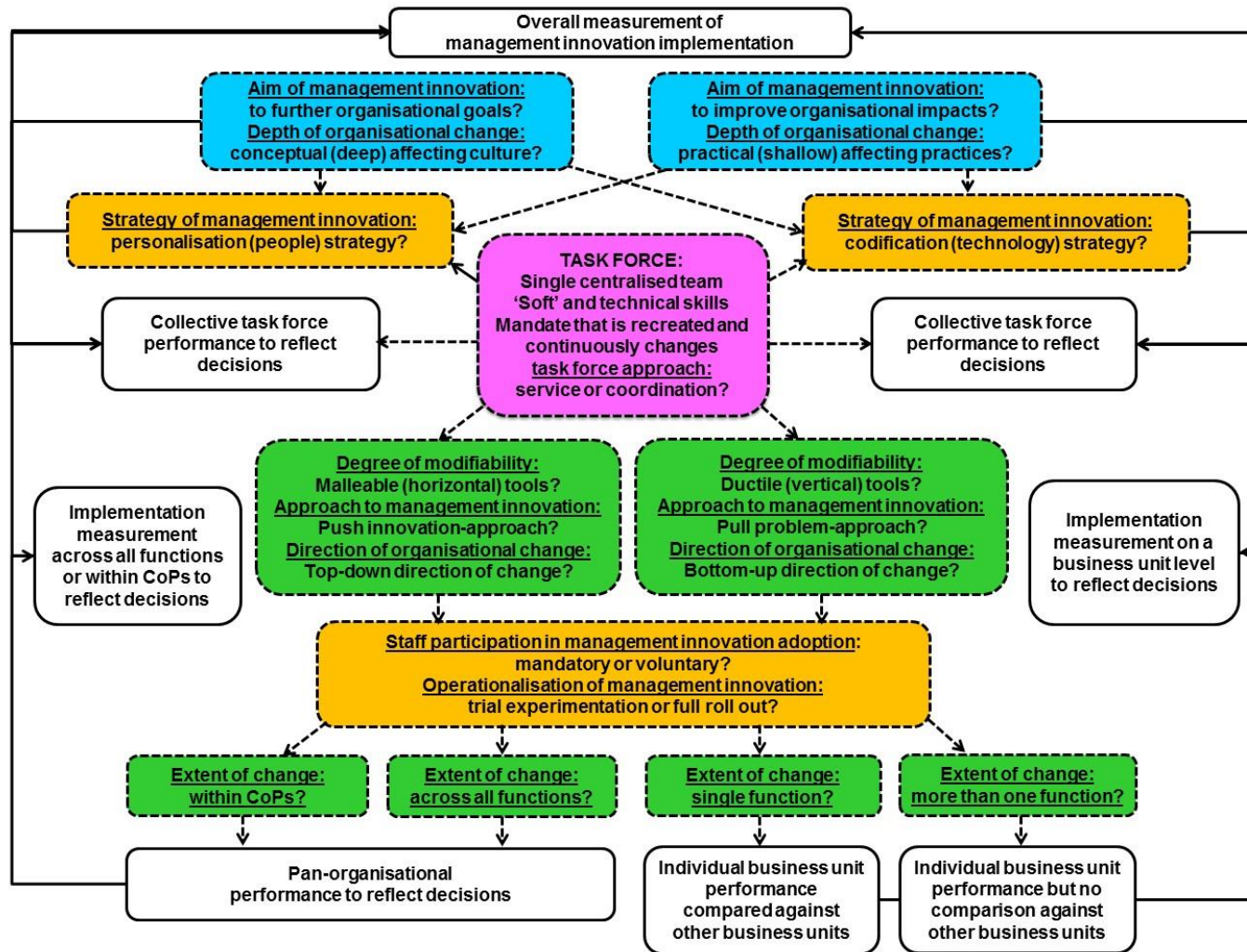
In the adoption-decision-model in Figure 7–2 on page 306 three decision-points are shown: (1) within three episodes (agenda-setting; selection/matching; and discontinuance); (2) between phases (initiation and implementation and implementation and outcomes), and (3) between two episodes (routinisation and discontinuance). The placement of these decision-points reflects the discussion in section 7.3.2 on page 284. This adoption-decision-model of management innovation is supported by the model of decision-making shown in Table 7–3 on page 290.

7.4.2 The lessons that can be learned from this particular case (RQ 9)

A summary of the process of adoption of Knowledge Working in PuSA lists: key decisions in each episode; the contextual/facilitating factors influencing decision-making; and the consequences of decisions made over the period of adoption (2000-2008) of Knowledge Working in PuSA. See Table 6–2 on page 249 in Chapter 6. Practitioners can draw conclusions from this summary and apply lessons learned to current or future management innovation projects.

A model has been developed for the adoption of a task force that includes decision-making (see Figure 7–3). This is derived from the empirical work in Chapters 4, 5 and 6 and the evaluation of literature in Chapter 2 (see Table 2–5 on page 54 in Chapter 2). It is recommended that a centralised task force be created that has soft and technical skills. This task force should have a remit that continually changes to address new organisational needs/problems as they arise. The groups of interrelated decisions to be considered are highlighted in different colours (these match those shown in the decision-making model in Figure 7–2).

Figure 7-3: A task force decision-adoption model



Source: original

7.5 Summary and conclusion

The theoretical insight about the process of adoption of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature review Chapter 2 includes:

1. Another type of implementation 'ad hoc' has been identified apart from the two types in the literature (experimentation and full roll-out) (RQ 1);
2. The use of discourse is methodologically significant. It can be used to trace the influence of internal contextual factors on the adoption of management innovation (RQ 2);
3. The suppression of conflict through 'pacification' can also be the cause of conflict in the process of adoption of management innovation (RQ 2);
4. The choice of organisational structure in the initiation phase had the biggest impact on adoption of management innovation (RQ 2);
5. The relative importance of external networks on the process of adoption of management innovation has been identified: (1) a political network plays an indirect role; (2) the cultural network plays a direct role; and (3) neither the industry nor regulatory network had any role to play (RQ 3);
6. 'Outcomes' labelling shows the option to discontinue or routinise a management innovation (RQ 4);
7. The external search for inspiration for new managerial ideas in the process of adoption can also be opportunity-driven to address potential organisational needs/problems yet to be identified (RQ 4);
8. The agenda-setting and research/knowledge episodes in the initiation phase of the adoption of management innovation are recursive (RQ 4);
9. The development of a decision-making model with groups of interrelated decisions (RQ 5);
10. There is a linear sequence of phases and non-linear sequence of episodes in the process of adoption of management innovation (RQ 6);
11. External/internal validation and theorisation/labelling are not distinct episodes in the process of adoption of management innovation (RQ 7);

12. The development of a combined adoption-decision model with two new episodes (knowledge/research and persuasion/validation) and three decision-points (RQ 8);
13. The development of a task force adoption-decision model (RQ 9).

Whilst all these findings generate new theoretical insight, four have been chosen to demonstrate a significant contribution to knowledge: finding 2, 9, 12 and 13. These will be discussed in more detail in the conclusion Chapter 8.

8 CHAPTER 8: CONCLUSION

8.1 Introduction

The previous chapter presented the theoretical insight gained from this process of adoption of management innovation in an organisational setting. The purpose of this conclusion chapter is to reflect on the research reported in this thesis. The evaluation is guided by 'big tent' criteria proposed by Tracy (2010) for evaluating qualitative research as presented in section 3.6 on page 135 in Chapter 3. For this study, the following criteria (in italics) are discussed under three of four sections that make up the body of this chapter:

- The first section reviews the research questions. It also assesses whether: (1) the study is of a *worthy topic* addressing a gap in the literature; and (2) there is *meaningful coherence*, or interconnection, between Chapters 2-7 to meet the research questions (RQs 1-9) in Chapter 1;
- A second section discusses the *contribution to knowledge* and *resonance* (or transferability) of practically useful findings;
- The next section addresses the suitability (or *rich rigour*) of the research design, and the use of thick description to convey a *credible* account of the study presented in the analysis Chapters 4, 5 and 6;
- The fourth, and final, section includes recommendations for further research.

8.2 Review of research questions

The research discussed in this thesis investigates the process of *adoption* of a management innovation in an organisational setting. As detailed in both introductory Chapter 1 and literature evaluation Chapter 2 previous research into management innovation has focused on the process of *generation* of management innovation (for example, Birkinshaw & Mol, 2006 and Birkinshaw, Hamel & Mol, 2008). However, the examination of prior work established a lack of knowledge on the process of *adoption* of management innovation (Damanpour & Aravind, 2012 p. 447). It is this gap that the research discussed in this thesis addresses. This study has therefore allowed for the generation of theoretical insight about the process of adoption of management innovation (and a particular type of management innovation labelled 'Knowledge Management) in an organisational setting, and a new set of interrelated models to manage this process.

Table 8–1 provides a comparison of extant research and the research reported in this thesis. This table highlights that the study presented in this thesis addresses a gap in the literature, thereby demonstrating Tracy's (2010) criteria of a worthy topic of research.

Table 8–1: A comparison of existing management innovation research and the research reported in this thesis

INNOVATION ATTRIBUTES	A summary of existing research reported in the literature evaluation in Chapter 2.	A summary of the research reported in this thesis in Chapters 4, 5 and 6.
Type of innovation	Existing research focuses on management innovation (in general), a subfield of organisational innovation.	This is the first study of a programme of Knowledge Management conceptualised as a type of management innovation.
Innovation process	Existing research has investigated the process of <i>generation</i> (or creation) of management innovation in organisational settings in general.	This study explores the process of <i>adoption</i> (or assimilation) of a programme of Knowledge Management labelled ‘Knowledge Working’ within a single public sector organisation. Adoption occurs within the context of organisational change and economic development.
Degree of novelty	Existing research looks at the <i>generation</i> of brand new management innovations that do not currently exist.	This study looks at the <i>adoption</i> of management innovation (in this case ‘Knowledge Management’) that is applied in a new organisational setting.

<p>Resources influencing the innovation process</p>	<p>Research explores the role of external resources (management consultants) and internal change agents (organisational staff) in the process of <i>generation</i> of management innovation.</p>	<p>This study considers the role of a variety of external and internal actors influencing the process of <i>adoption</i> of management innovation. It specifically focuses on a task force (a group of practitioners) recruited to facilitate the adoption of management innovation.</p>
<p>Models of management innovation and innovation (in general)</p>	<p>Two models of management innovation exist, and various models of innovation.</p>	<p>A more detailed set of interrelated models has been created: (1) an adoption-decision model of the process of adoption; (2) a decision-making model of decisions at different points in the process of adoption; and (3) a task force adoption-decision model detailing decisions to consider when introducing task forces to implement management innovation.</p>

Source: original

These findings have been derived from the starting point of the main research question: *What is the process of adoption of a management innovation in an organisational setting?* Two further sets of ancillary questions were identified. The first set of three questions (RQs 1-3) relates to the *attributes* of management innovation. The second set of four questions (RQs 4-7) relates to *phases and episodes* across the whole process of adoption of the management innovation. In addition, a third and final, set of two questions (RQs 8-9) explores the *practical value* of the research output. These research questions (RQs 1-9) are summarised in Table 1–1 on page 3 in Chapter 1.

These research questions (RQs 1-9) were addressed through meaningful coherence (or interconnection) between Chapters 2–7. This is described below in keeping with Tracy's (2010) requirement to demonstrate the flow of the thesis argument from chapter to chapter.

- The literature evaluated in Chapter 2 covers all the research questions relating to: (1) attributes of management innovation (RQs 1-3); and (2) phases and episodes across the whole process of adoption of the management innovation (RQs 4-7). This chapter covers characteristics of management innovation, and Knowledge Management as a management innovation. Differences between the process of generation and adoption, sequencing of episodes within these processes, and decision-making across all phases of the process of adoption has been assessed. The literature evaluated also covers the internal and external factors influencing the process of adoption of management innovation in organisational settings. The remainder of the chapter focuses on Knowledge Management, a management innovation relevant to the case study reported in Chapters 4, 5 and 6.
- In methodology Chapter 3 a research framework for the process of adoption of management innovation that includes phases, episodes, and decision-making can be seen in Figure 3–7 on page 133 in Chapter 3. This model was developed from findings in the literature evaluation Chapter 2 relating to: (1) potential phases and episodes that may appear in the process of adoption of management innovation (see RQ 4); and (2) key decision-points and options

that may occur across the process of adoption of management innovation (see RQ 5). This study adopted a pragmatic stance adopting research methods best suited to address all the research questions (RQs 1-9). The suitability of the research design and methods will be discussed in more detail below.

- The analysis Chapters 4, 5 and 6 are bracketed into three phases (initiation, implementation, and outcomes) of the process of adoption of management innovation outlined in the research framework in Figure 3–7 on page 133 in Chapter 3. The analysis in each chapter explores and describes the episodes in each phase of the process of adoption of a programme of Knowledge Management (labelled ‘Knowledge Working’) in the case study organisation. The analysis was guided by the literature findings in Chapter 2, which are summarised in Figure 2–5 on page 80 in Chapter 2. This summary draws attention to contextual factors (for example, organisational structures; external and internal networks; power and conflict; and ambition for change) influencing the process of adoption of innovation (in general) in organisational settings. The analysis also investigated decision-making, as this is a key feature of the process of adoption of management innovation. In addition, four discourses (pan-organisational ‘fiefdom’ and ‘one network’ discourses and corresponding subsidiary ‘local delivery’ and ‘network delivery’ discourses) contextualise the findings. The findings derived from the case study in Chapters 4, 5 and 6 contributes evidence that is relevant to addressing all of the study’s research questions (RQs 1-9).
- Chapter 7 discusses new theoretical insight about the process of *adoption* of management innovation as gained from the analysis Chapters 4, 5 and 6 and the literature review Chapter 2. The research findings and practical outputs presented in Chapter 7 contributes to new knowledge in management innovation and Knowledge Management. This will be considered next.

It can be seen that the thesis meets Tracy’s (2010) criteria for a line of argument that follows logically through the account of the research completed.

8.3 The contribution to knowledge and practice

The new theoretical insight about the process of *adoption* of a particular type of management innovation labelled 'Knowledge Management' (as gained from the analysis Chapters 4, 5 and 6 and the literature review Chapter 2) is listed in the conclusion of Chapter 7. Whilst all of the new findings (1-13) contribute to knowledge, four in particular, are worth discussing here:

1. A model of decision-making across the process of adoption of management innovation;
2. A combined adoption-decision model of management innovation;
3. A task force adoption-decision model;
4. The use of discourse to trace the influence of internal contextual factors on the adoption of management innovation.

The first three theoretical contributions are interrelated and have practical utility, whilst the fourth is methodologically significant.

The first significant contribution is a model of decision-making (Finding 9) relating to RQ 5: *What are the key decision-points and options within each phase of the process of adoption of management innovation?* To date no attempt has been made to model decision-making for the process of *adoption* of management innovation (in general) or Knowledge Management.

The decision-making model (see Figure 7–3 below) includes decision-making across phases, and 'decisions-between-alternatives' within the agenda-setting and matching episodes of the initiation phase of the process of adoption of management innovation. These decisions-between-alternatives relate to: (1) the adoption of management innovation in general; and (2) the adoption of a task force to facilitate the management innovation implementation. This model also includes recommendations for decision-making in other episodes in the implementation and outcomes phase of the process of adoption of management innovation. Additionally, four groups of interrelated (or compatible) 'decisions-between-alternatives' have been identified to reduce complexity, and avoid problems, in adopting management innovations in organisational settings.

Table 8–2: A model of decision-making across the process of adoption of management innovation

Phases in the process of adoption of management innovation	Episodes in the process of adoption of management innovation	Attributes of decision-making		Decision-between-alternatives (and/or decisions) for management innovation. Recommendations from the literature (Currie, 1991; BSI, 2005) is highlighted in bold.	
Initiation (Phase 1)	Agenda-setting	Agenda for organisational change:	Aim of management innovation:	To further organisational goals (for example, facilitate organisational change)	To enhance firm performance (for example, improve organisational impacts)
		Nature of organisational change:	Depth of organisational change:	Conceptual (deep) affecting organisational culture	Practical (shallow) affecting organisational practices
	Selection/matching		Extent of organisational change:	Broad across all organisational functions	Narrow within one or more (but not all) organisational functions
			Direction of organisational change:	Top-down direction of change from experts to local users	Bottom-up direction of change from local users to peers
		Type of adoption of management	Strategy of management innovation:	Personalisation (people focused) strategy	Codification (technology focused) strategy

		innovation:	Approach to management innovation adoption:	Push innovation-centred approach focusing on identifying needs/problems of potential users of an available innovation	Pull problem-centred approach focusing on identifying local needs/problems to address through a potential management innovation
		Nature of adoption of management innovation:	Participation in management innovation adoption:	Mandatory where participants do not have a choice to adopt or reject a management innovation	Voluntary where participants have a choice to adopt or reject a management innovation
			Degree of modifiability of management innovation:	Ductile management innovations that can extend vertically across organisational hierarchy	Malleable management innovations that can extend horizontally across organisational boundaries
				Operationalisation of management innovation:	Trial experimentation with a few potential users first
		Means of	Resources	Using a task force to	Using individuals or

		implementing management innovation:	required to adopt management innovation:	operationalise management innovation	groups of people who may not require specialist skills to operationalise management innovation
Decisions-between-alternatives (and/or decisions) for task forces. These task force decisions are contingent on management innovation decisions.					
		Implementing task force resources:	Location of task force	Staff are co-located in a single team in one location	Staff are distributed across the organisation in different locations
			Management of task force	Centralised management by a single central unit	Management decentralised to local adopting units
			Competence of task force	Staff have technical skills	Staff have social skills
			Mandate of task force	A mandate that is recreated and continuously changes	A mandate that is static and does not change
			Approach of task force	Service approach: initiate management	Co-ordination approach: coordinate

				innovation activities in conjunction with staff, develop and pilot them, then transfer ownership to staff members for delivery and maintenance	the implementation of management innovation activities, including those chosen, owned and maintained by staff located in different functions or locations.
Please note: decision-making recommendations in episodes below are based on findings in the literature in Chapter 2 and empirical study in Chapters 4, 5, and 6.					
	Persuasion/ validation	It is recommended that decisions to favour adoption or rejection of management innovation is contingent on: (1) the compatibility of decisions made in the agenda-setting and selection/matching episodes of the initiation phase; and (2) the compatibility between: (a) the management innovation; (b) the aim (or agenda) for organisational change; and (c) informal/formal organisational structures; and (3) the degree to which the management innovation receives internal/external validation.			
Implementa- tion (Phase 2)	Modification	It is recommended that the decision to modify management innovation and/or informal/formal organisational structures (or not) is contingent on: (1) the degree of modifiability of management innovation; and (2) the compatibility between: (a) the management innovation; (2) the aim (or agenda) for organisational change; and (3) informal/formal organisational structures.			
	Operationalisa-	It is recommended that the decision to operationalise management innovation (or not) is			

	tion	contingent on: (1) the compatibility of decisions in the agenda-setting and selection/matching episodes of the initiation phase; and (2) the compatibility between: (a) the management innovation; (b) the aim (or agenda) for organisational change; and (3) informal/formal organisational structures following modification (if required).
	Clarification/ confirmation	It is recommended decisions on how to clarify/theorise (or make sense of) and confirm/validate management innovation is contingent on all other decisions made in the agenda-setting and selection/matching episodes in the initiation phase.
Outcomes (Phase 3)	Routinisation	It is recommended that the decision to continue adoption (or not) is contingent on: (1) findings in the clarification/confirmation episode in the implementation phase; or (2) the discovery of a replacement management innovation perceived to be suitable to address the managerial need, problem or opportunity in question.
	Discontinuation	

Source: original

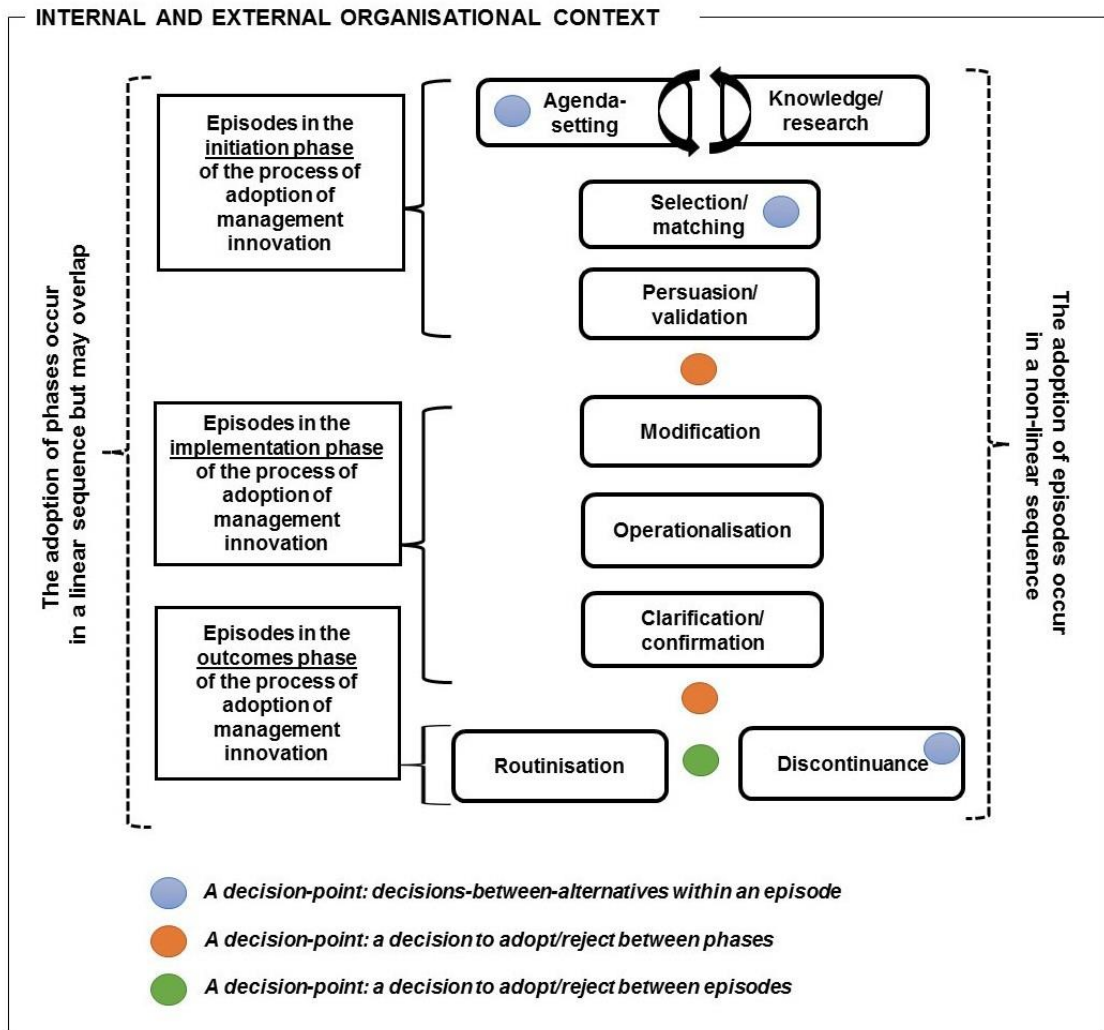
The second significant contribution (Finding 12) is a combined adoption-decision-model of management innovation. This relates to RQ 8. *To what extent can the process of adoption of a management innovation be modelled for practical use?* In the innovation literature there are two separate models: an innovation-adoption model and an innovation-decision model (see Rogers, 2003 pp 138 & 421) previously published. No attempt has been made to combine these two separate models.

The combined adoption-decision-model presented in Figure 7–2 below includes: (1) three phases (initiation, implementation, and outcomes); (2) nine episodes that occur across these three phases (three episodes in the initiation phase; four episodes in the implementation phase, and two episodes in the outcomes phase); and (3) decision-making options at different points across the process of adoption of management innovation. This new model includes an additional phase (outcomes) and two additional episodes (knowledge/research and discontinuance) not included in Rogers (2003 p. 421) general adoption-model of innovation in organisational settings. In this model there are three points at which ‘decisions-between-alternatives’ take place in the process of adoption of management innovation: (1) a decision marking a transition between three phases (initiation, implementation, and outcomes); (2) decisions within episodes in each phase; and (3) a decision marking a transition between discontinuance and routinisation episodes. The types of decisions that can be made at each point in the process of adoption of management innovation can be seen in the decision-making model in Table 7–3 discussed above (see contribution 2).

The development of this combined adoption-decision-model was supported by three new findings (6, 9 and 11), which related to two research questions:

- RQ 4: *What are the phases and episodes in the process of adoption of management innovation?*
 - Finding 6 contributes to the labelling 'outcomes' of the third phase of adoption in the adoption-decision-model;
 - Finding 8 contributes to the recursive depiction of the agenda-setting and research/knowledge episodes in the adoption-decision model.
- RQ 5: *To what extent are the sequence of phases and episodes in the process of adoption of a management innovation linear or non-linear?*
 - Finding 10 contributes to the linear sequence of phases and non-linear sequence of episodes in the adoption-decision model.

Figure 8–1: A management innovation adoption-decision model



Source: original

A description of the episodes in the combined adoption-decision model (see Figure 7–2 above) are shown below. These descriptions are taken from Table 7–6 on page 307 in Chapter 7.

Initiation phase 1:

- The *agenda-setting episode* involves setting an agenda for change by defining an organisational problem, need, or opportunity that motivates individual/s to consider adopting their own management innovation;
- The *knowledge/research episode* involves: (1) becoming aware of new management innovations serendipitously; or (2) undertaking internal/external planned research to: (a) identify organisational problems, needs, or opportunities that potential management innovations can address; and/or (b) seeking inspiration for new management innovations (including gaining knowledge of the aims, nature and means of management innovation) that can address current or potential organisational problems, needs, or opportunities;
- The *selection/matching episode* involves: (1) selecting a management innovation infrastructure that matches (is compatible with) the agenda for organisational change; (2) planning and designing the match between management innovation and existing/desired organisational structures (formal and/or informal), or vice versa; and (3) anticipating the enablers and barriers to implementation;
- The *persuasion/validation episode* involves seeking and/or generating external/internal validation to help persuade individual/s (form a favourable attitude) to adopt management innovation.

Implementation phase 2:

- The *modification episode* involves modifying the infrastructure for management innovation to accommodate: (1) the agenda for organisational change; and (2) existing/desired organisational structures (formal and/or informal), and vice versa;
- The *operationalisation episode* involves putting a management innovation into use for the first time either by: (1) trial experimentation with a few users; or (2) full roll out to all users;
- The *clarification/confirmation episodes* involves: (1) clarifying/theorising (or making sense of) the relationship between management innovation and organisational structures (formal and/or informal); and (2) seeking confirmation/validation for continued adoption.

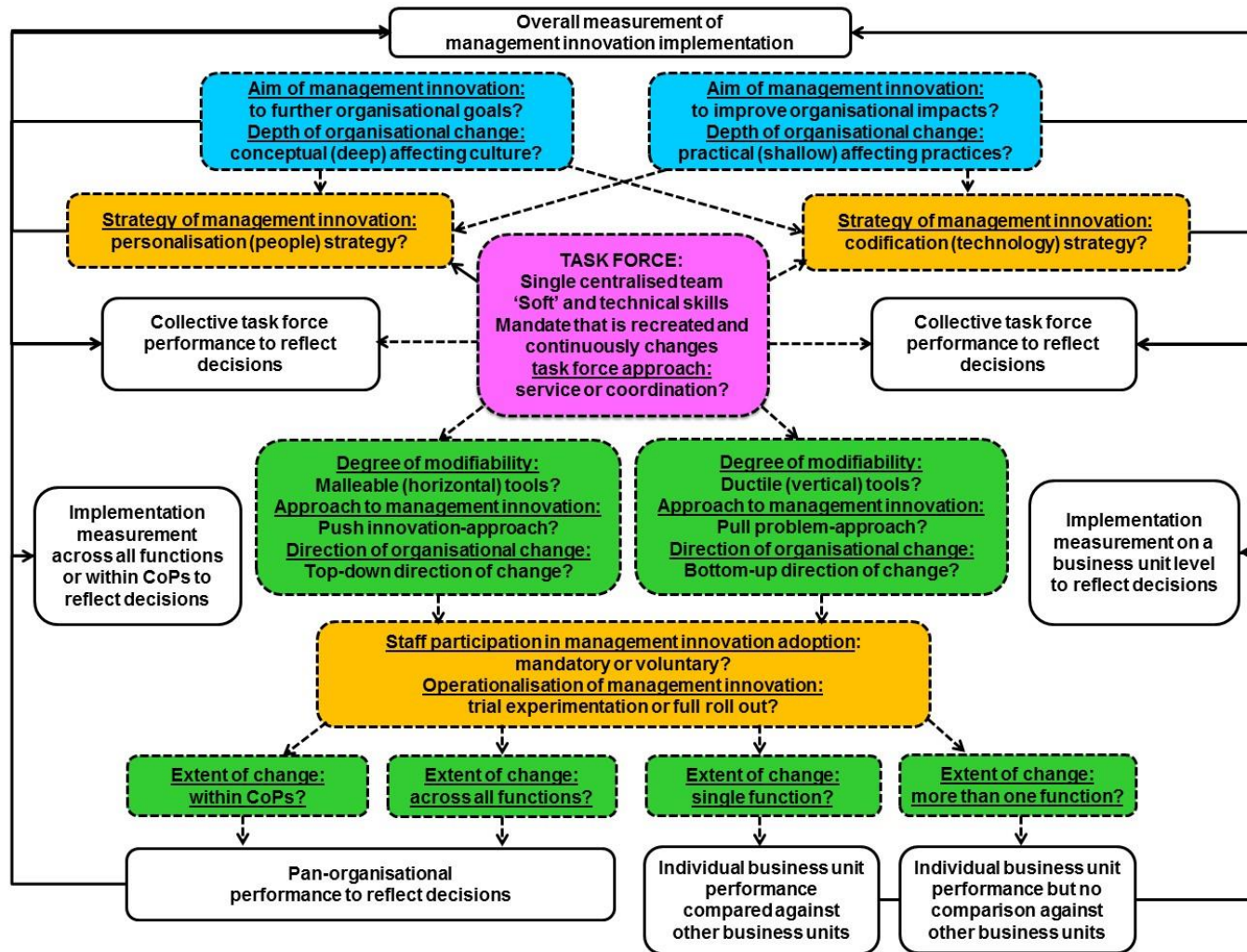
Outcomes phase 3:

- The *routinisation episode* involves continuing the adoption of management innovation so that it becomes an ongoing element in organisational activities, and is now seen as a standard/routine working practice;
- The *discontinuance episode* involves either: (1) replacing a management innovation with a better idea; or (2) ceasing adoption due to disenchantment/ dissatisfaction with performance.

A third significant contribution (Finding 13) is the development of a model for the adoption of a task force that includes decision-making. This relates to RQ 9: *What lessons can be learned from this particular study?* At present, no framework exists that includes decisions to consider in the adoption of task forces in general, and task forces within the context of the implementation of Knowledge Management.

This management innovation model (see Figure 7–3 below) recommends that a centralised task force be adopted in organisations that: (1) comprise staff with both technical and softer skills (for example, communication and facilitation skills); and (2) has a fluid mandate (or remit) that changes when new organisational needs or problems are identified. These findings are generated from the empirical research in Chapters 4, 5 and 6 and the evaluation of literature in Chapter 2. The framework shows groups of interrelated decisions choices (with reference to the decision-making model in contribution 1) to be made when adopting a programme of management innovation. Additionally, this model also shows the interrelationship between performance at a business unit level, a task force level, and at pan-organisational level. Decisions on how to measure performance at these levels relate to other ‘decisions-between-alternatives’ made within the agenda-setting and knowledge/research episodes in the initiation phase of the process of adoption of management innovation.

Figure 8–2: A task force decision-adoption model



Source: original

The fourth, and final, contribution is of methodological significance. In Chapter 4 four discourses were identified that were representative of the agenda for organisational change in a distributed organisation with a headquarters and subsidiaries (see Table 4–3 below). This relates to RQ 2: *What is the influence of internal factors on the process of adoption of management innovation?*

The identification of discourses at pan-organisational and subsidiary (or business unit) levels can reflect the existing state of organisational operations and a future desired state. These discourses are representative of *informal* organisational structure (signification, domination, and legitimation) typically reflected in different cultures (power, role, person, competitive, or task) guiding staff behaviour. Additionally, these discourses are representative of *formal* organisational structure including: type of organisation; mechanisms (organic or mechanistic) used to coordinate work; and centralised or decentralised decision-making arrangements. Discourses can be used to analyse the compatibility between management innovation, informal and formal organisational structures, and the agenda for organisational change. It can also highlight problems associated with decision-making in the initiation phase of the adoption of management innovation, and the consequences of these decisions in the implementation and outcomes phases.

Table 8–3: PuSA’s agenda for organisational change expressed as discourses

PAN-ORGANISATIONAL DISCOURSES (a change from one pan-organisational state to another)	
‘FIEFDOM’ (1999) Signification: autonomy Domination: decentralisation Legitimation: inconsistency	‘ONE NETWORK’ (2008) Signification: collaboration Domination: centralisation Legitimation: consistency
Signification: independence Domination: resource hoarding Legitimation: diversity ‘LOCAL DELIVERY’ (1999)	Signification: cooperation Domination: resource sharing Legitimation: uniformity ‘NETWORK DELIVERY’ (2008)
CORRESPONDING SUBSIDIARY DISCOURSES (a change from one subsidiary state to another)	

Source: original

The analysis and findings presented in this thesis also has 'practical utility' (Corley & Goia, 2009 p. 12) that will resonate with a practitioner audience. For example, the case summary of the analysis presented in Chapters 5, 6 and 7 provides an overview of key decisions in each episode; contextual/facilitating factors influencing decision-making; and the consequences of decisions made over the period of adoption (2000-2008) of Knowledge Working in PuSA. See Table 6–2 on page 249 in Chapter 6. Practitioners can draw conclusions from this summary and apply lessons learned to current or future adoptions of management innovation. In addition, the three models (a model of decision-making; a combined adoption-decision-model; and a task force adoption-decision model) developed in Chapter 7, and discussed above, are practically useful to those considering adopting management innovation in organisational settings. These three interrelated models can be used as tools for the project management of management innovations by identifying the questions to be addressed, and the decisions to be made at particular points of the process, taking into account local contexts. Derived directly from the empirical work discussed in this thesis, these models can be readily adopted and tested in practice.

8.4 Suitability of research design

The evaluation now turns to the suitability of the research design in analysing the data in Chapters 2, 3 and 4 to generate the discussion of findings reported in Chapter 7. The content of Chapter 3 responded to increased calls for sincerity in research. This refers to increased transparency about methods used and research limitations (Tracy, 2010). These factors will be considered here.

There is a choice of four main discourses in organisational research (normative, interpretive, critical or dialogic) (Deetz, 1996). Each reflects different underlying beliefs (Orlikowski & Baroudi, 1991) and ways of engaging in research (Buchanan & Bryman, 2007). This study took a pragmatic view that drew on traditions of dialogic and critical discourse to best answer ancillary research questions (RQs 1-9) relating to the main research question: *what is the process of adoption of management innovation in an organisational setting?* A pragmatic research design for generating valid empirical knowledge included: an inductive case study strategy; qualitative multi-methods; and a longitudinal timeframe to gather material and analyse data. This allowed for the study of contextual factors, such as power and conflict, which influenced the process of adoption of management innovation in the case study organisation. It facilitated both description and exploration of the management innovation 'Knowledge Working' in PuSA, and how it changed over the period of its adoption.

A single case study allowed for an in-depth investigation of the process of adoption of a management innovation in an organisational setting. The analysis Chapters 4, 5 and 6 provides a credible account through 'thick description' of the process of adoption of Knowledge Working in PuSA. The investigation of the contextual factors between 1995 and 1999 leading up to the decision to initiate first one, then another, programme of organisational change in PuSA (K-Web Programme 1 in 1999 and BT Programme 2 in 2000) described in Chapter 4 conveys, as suggested by Klein and Meyers (1999), how the study under investigation emerged. The remainder of Chapter 4, and Chapters 5 and 6, investigates the process of adoption of Knowledge Working between 2000 and 2008 within this wider context of organisational change. The theoretical insight gained from this analysis suggests that the case study organisation was an appropriate site in which to conduct research.

The researcher was fortunate to be an employee in the case study organisation, and in the right place at the right time to study the process of adoption of the management innovation under scrutiny. To this end, a case study strategy was useful because it accommodated a variety of researcher roles (for example, historical archive, historical observer, participant observer, and observant participant) adopted to gather material covering a longitudinal period (between 1995 and 2000). This strategy allowed for the collection of both historical and situated qualitative electronic material from a range of external sources (for example, documents and web pages from the internet) and internal sources (for example, emails from a personal email account, documents from the intranet, and field notes from personal observation). This gathering of extensive material mitigated against researcher bias.

Case study research, in general, is perceived to be less rigorous than normative research (Flyvberg, 2001; Yin, 2003). This is due to the practical difficulties often encountered when undertaking such research (Darke et al, 1998). For this research, a qualitative 'case study protocol' (Yin, 2003 p. 67) setting out four stages (and various steps) in the field work helped guarantee the rigour of the approach. The qualitative multi-method procedures and techniques used to gather material, simplify the material into data for analysis, and then analyse the data (which form part of the steps outlined in stages 2 and 3) drew on established practices in qualitative research. For example, a 'case study database' (Yin, 2003 p. 101) held all relevant data pertinent to the analysis. Additionally, a chronological method to display data commonly used in process (Poole et al, 2000) and longitudinal case study research (Yin, 2003) was adopted here.

The use of a chronological timeline and manual coding helped aid the deconstruction (or close review) of events and texts over a longitudinal timeframe (1990-2008). These events and texts were reconstructed (or framed) as phases and episodes in the process of adoption of management innovation. Close attention to contextual factors and decision-making across phases and episodes allowed for the reconstruction of the 'story' of the process of adoption of Knowledge Working in PuSA in Chapters 4, 5 and 6. The use of 'thick description', with many quotations and references to labelling used in PuSA conveys the 'authenticity' (Pozzebon, 2003) of the research site. In turn, this helped develop a plausible, and thus credible, account of the process of adoption of Knowledge Working in PuSA. Cross-referencing between the analysis Chapters 4, 5 and 6 and the chronological timeline in Appendix A also demonstrates rich rigour that helps account for new findings presented in Chapter 7.

The research approach, however, was not without its limitations. This study was undertaken primarily from the perspective of the Knowledge Analysts. The case report, therefore, excludes challenges and problems faced by the Knowledge Working Team. It also does not report on the reasons subsidiary senior management chose to modify Knowledge Working structures and Knowledge Analyst jobs. The findings therefore do not tell the whole story from the perspective of other actors. It is therefore recommended that caution is taken in interpreting the results reported in thesis as a 'failure' to adopt Knowledge Working in PuSA. Despite the problems reported in Chapter 6, Knowledge Working tools were implemented on either an experimental basis, or rolled-out across the organisation, or implemented on an ad-hoc basis.

Another key limitation is the length of time of the study. There was not enough data to establish whether or not the Knowledge Working tools (in the guise of 'organisational learning' and 'information management') were routinised after February 2007 when this study ended. The analysis in Chapter 6 (the outcomes phase of management innovation) could only give an indication of the decision taken to continue adoption (leading to routinisation), or discontinue (leading to rejection). Milton's (2014) research suggests that, in order to study the routinisation of Knowledge Management, researchers would have to gather material for data analysis over a decade (or more). Taking this into consideration, it can be argued that the researcher spent an appropriate length of time in the organisation (between July 2003 and February 2007).

Despite these limitations, the research design helped contribute insight into the process of adoption of management innovation in an organisational setting. The contributions to knowledge and practice discussed earlier in section 8.2 are evidence of the value and rigour of the chosen approach.

8.5 Recommendations for further research

The three models (decision-making model; combined adoption-decision model; and task force adoption-decision model) discussed in section 8.3 above were generated from the study of Knowledge Management (a programme of management innovation) in a distributed public sector organisation of medium size, and an evaluation of extant literature. From the evaluation of literature in Chapter 2, management innovations can be adopted in organisations of variable size (for example, small; medium; or large) with different characteristics (for example, formal and informal structures), operating in a variety of environments (for example, simple, dynamic, and complex) and in different sectors (for example, public or private). See section 2.5.1 on page 60 in Chapter 2 for an overview. Management innovations, too, range from singular projects (for example, balanced scorecard) to wider programmes (for example, Knowledge Management). See section 2.2 on page 12 in Chapter 2 for other examples of management innovations. A suggestion for further research therefore includes assessing (or testing) the applicability of these three models to other types of organisations adopting similar or different management innovations.

In assessing the applicability of the combined adoption-decision model key considerations include: omission of episodes; sequencing of episodes; and transition of episodes. Research suggests that: (1) not all episodes may be evident in the innovation process (for example, Rogers, 2003); (2) the sequence of episodes may be more difficult to identify when adopting complex innovations (Gopalakrishnan & Damanpour, 1994); and (3) the transition between episodes (explained through decision-making) may be more difficult to determine in organisational settings where there is less formal decision-making (Gopalakrishnan & Damanpour, 1994). In addition, a longer time horizon is required (a decade or more, Milton, 2004) to determine whether a transition occurs between the routinisation and discontinuance episodes in the third, and final phase, of adoption.

Decision-making (for example, sequencing of decisions; decisions-between alternatives; and contingent decisions) is worth exploring further. In both the decision-making model and combined adoption-decision model decisions are shown to take place in two episodes: agenda-setting and selecting/matching. This may not be representative of the sequence of decision-making in other organisational settings. It is also worth investigating whether the decisions-between-alternatives in the decision-making model and task force adoption-decision model are reflective of all 'generic' decisions taken in the process of adoption of management innovation. Lastly, in the model of decision-making, a number of recommendations have been made for decision-making within each episode in the implementation and outcomes phase. Further research should consider whether: (1) contingent decisions are based on prior decisions taken; and (2) there are any other contingent decisions to consider. It is anticipated that contingent decisions will be influenced by the sequence of decision-making in organisational settings, and the identification of any additional decisions-between-alternatives in the adoption of management innovation or task forces.

It is recommended that additional methods (for example, personal observation; interviews; and surveys) be used in conjunction with any documentary evidence to test the findings presented in this thesis. This will help assess whether people are aware of, or recognise: (1) the phases and episodes shown in the combined adoption-decision making model; and (2) the decisions to consider (shown in the decision-making model and task force adoption-decision model) when adopting task forces and management innovations. The use of alternative methods will also provide more information on decision-making and other factors influencing the process of adoption in other organisations (see section 2.4 on page 51 in Chapter 2 for decision types; see Figure 2–2: Perceived attributes of innovation and system readiness for innovation; and section 2.5 on page 60 for contextual factors influencing the process of adoption in organisational settings). These factors may account for any variations in findings from those presented in this thesis.

8.6 Conclusion to this chapter

This research reported in this thesis has answered the main research question this study sought to address: *What is the process of adoption of management innovation in an organisational setting?*

The outputs of this research shows that the process of adoption of management innovation consists of three phases (initiation, implementation, and outcomes). The initiation phase has four episodes (agenda-setting; research/knowledge; selection/matching, and persuasion/validation). The second phase, implementation, has three episodes (modification, operationalisation, and clarification/confirmation). The third, and final phase is outcomes that has two episodes (discontinuance and routinisation). The phases occur in a linear sequence but may overlap, whilst the episodes occur in a non-linear sequence. Three decision-making points, and the options within them, are reflective of the sequence and types of decisions that occur across all phases of the process of adoption of management innovation.

This study also reveals that contextual factors (for example, organisational setting, networks involved, power and conflict) influence the process of adoption of a management innovation. Whilst the process of adoption of management innovation is system-specific, the research contributions (a general decision-making model; a general adoption-decision-model, and a general KW task force adoption-decision) are practically useful to practitioners adopting management innovation (in particular, a type of management innovation labelled 'Knowledge Management') in organisational settings.

The reflections on methodological choice in Chapter 3 and Chapter 8 demonstrates that the work meets the 'big tent' criteria (Tracy, 2010 p. 840) of: worthy topic; meaningful coherence; significant contribution; resonance; rich rigour; sincerity; credibility; and ethical concerns.

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APPENDIX A: CHRONOLOGICAL TIMELINE OF EVENTS AND TEXTS

#	YEAR	MONTH	DESCRIPTION	SOURCE	FORMAT	DERIVED
1	1969		The knowledge economy discourse starts circulating (originator Peter Drucker) (1969)	WEB	HTML	INTER
2	1979		A UK Conservative Government is elected (1979)	WEB	HTML	INTER
3	1985		The Scottish Office is formed (a department of the UK Government) (1985)	WEB	HTML	INTER
4	1990		A UK Act of Parliament establishes a public sector agency (PuSA's) (1990)	DOC	PDF	INTER
5	1991		PuSA HQ CEO 1 takes up post (1991)	WEB	HTML	INTER
6	1991		PuSA headquarters and agencies begin operations (1991)	WEB	HTML	INTER
7	1991		PuSA's remit includes all facets of economic development (1991)	DOC	WORD	INTER
8	1996		HQ Futures Thinking Director returns from secondment at a global consulting firm (1996)	DOC	WORD	INTER
9	1996		HQ Futures Thinking Director's 'Change of Age' presentation is diffused to numerous audiences (between 1996 and 1999)	DOC	PPOINT	INTER
10	1996		An e-business discourse starts circulating (originator IBM management consultants) (1996)	WEB	HTML	INTER
11	1997		A UK Labour Government is elected (1997)	WEB	HTML	INTER
12	1997		Scottish Office news release re: taking a close interest in PuSAs strategic direction (1997) News release Scottish Office 11 Dec 1997 p.1	WEB	HTML	INTER

13	1997	Jun	News release: Secretary of State for Scotland asks PuSA HQ to review its strategy (June 1997)	WEB	HTML	INTER
14	1997	Dec	A political directive is issued to hold a referendum on devolution in Scotland (1997)	DOC	PDF	INTER
15	1998		HQ innovation group paper on implementing PuSA's new strategy highlights significance of knowledge and KM (1998)	DOC	WORD	CD
16	1998	Nov	An innovation group member emails colleagues describing 1998 paper as a 'visioning piece' to 'get buy in' to introduce KM into PuSA November 1998)	DOC	WORD	CD
17	1998	Dec	News release: Secretary of State for Scotland challenges PuSA to lead in building knowledge economy (December 1998)	WEB	HTML	INTER
18	1999		The Scottish Office becomes the Scotland Office (1999)	WEB	HTML	INTER
19	1999	Jul	A Scottish Parliament and Scottish Executive is formed (July 1999)	WEB	HTML	INTER
20	1999	Mar	UK Modernising Government (introduced March 1999 launched May 1999)	DOC	PDF	INTER
21	1999	Apr	HQ CEO 1 initiates K-Web change programme 1 (April 1999)	DOC	WORD	CD
22	1999	Apr	PA Consulting Group management consultants appointed (April 1999)	DOC	WORD	CD
23	1999	Apr	K-Web assessment: high level review of structure, operations and processes (1999)	DOC	WORD	CD
24	1999		K-Web planning: high level review of implementation costs and risks (1999)	DOC	WORD	CD
25	1999	Jun	PuSA HQ economic development strategy published 'to help Scotland's economy meet the global challenges for the 21st century' (June 1999)	DOC	PDF	CD

26	1999	Dec	120 K-Web opportunities selected (HQ senior management presentation, December 1999)	DOC	WORD	CD
27	1999	Dec	Scottish Executive 21st Century Scotland Strategy introduced December 1999	WEB	HTML	INTER
28	1999		K-Web rationale document on PuSAs intranet (1999)	DOC	WORD	CD
29	1999		K-Web presentation on PuSAs behaviours mentions 'fiefdoms' and not everyone believes in 'one network' working (1999)	DOC	PPOINT	CD
30	1999		New KM Directorate established: formerly strategy and planning functions (1999)	DOC	PPOINT	CD
31	1999		K-Web What's emerging? presentation: mentions 'one network' working and knowledge sharing (1999)	DOC	PPOINT	CD
32	2000		Knowledge areas for focus 'opportunities' presentation: turbo dashboard etc. (2000)	DOC	PPOINT	CD
33	2000	Jan	PuSA HQ CEO 2 starts (January 2000)	DOC	WORD	CD
34	2000	Jan	K-Web overview presentation to PuSA board (January 2000)	DOC	PPOINT	CD
35	2000	Feb	PuSA HQ CEO 2 initiates BT programme 2 (February 2000)	DOC	WORD	CD
36	2000	Mar	Cap Gemini Ernst & Young (CGE&Y) management consultants appointed (March 2000)	DOC	WORD	CD
37	2000	Mar	HQ CEO 2 launches an internal review of PuSAs structure and operations (March 2000)	INTRA	HTML	CD

38	2000		BT intranet page: modernising government (2000)	INTRA	HTML	CD
39	2000		BT intranet page: external and internal reviews (2000)	INTRA	HTML	CD
40	2000		BT intranet page: a changing environment (2000)	INTRA	HTML	CD
41	2000		BT intranet page: key messages and facts (2000)	INTRA	HTML	CD
42	2000		BT intranet page: BT FAQs/ Why BT? (2000)	INTRA	HTML	CD
43	2000		BT intranet page: internal need for change (2000)	INTRA	HTML	CD
44	2000		BT intranet page: being the best for Scotland (2000)	INTRA	HTML	CD
45	2000		BT visioning presentation: identifying 'key areas for focus' (2000)	DOC	PPOINT	CD
46	2000		BT KM summary presentation to develop knowledge capability and knowledge communities (2000)	DOC	PPOINT	CD
47	2000	May	BT All staff roadshows piloted (May 2002)	DOC	WORD	CD
48	2000	May	BT assessment: detailed assessment of structure, operations, and processes (May 2000)	DOC	WORD	CD
49	2000	Jun	BT assessment: various 'voice of the customer' focus group documents (June 2000)	DOC	WORD	CD
50	2000	Jun	BT assessment: various 'leading practice' review documents (June 2000)	DOC	WORD	CD
52	2000		BT cost benefit guide presentation (2000)	DOC	PPOINT	CD
53	2000		BT process guidance stage 2 presentation (2000)	DOC	PPOINT	CD
54	2000		BT 'if then' guidance stage 3 presentation (2000)	DOC	PPOINT	CD
55	2000		BT challenge panel presentations: decision to adopt or reject (2000)	DOC	PPOINT	CD

56	2000	Jun	BT KM initial experimentation: K-mark; after action reviews, knowledge areas; organik; power packs; developing communities (2000)	DOC	WORD	CD
57	2000	Jul	BT HQ senior management update paper: includes planning (2000)	DOC	WORD	CD
58	2000	Jul	CGEY consultants KM solutions overview presentation (July 2000)	DOC	PPOINT	CD
59	2000		CGEY consultants knowledge centres presentation (2000)	DOC	PPOINT	CD
60	2000	Jul	Scottish Executive launches external review of PuSA's structure and operations (July 2000)	INTRA	HTML	CD
61	2000		Scottish Executive publishes a strategy for a successful Scotland: PuSA to work as one network (2000)	DOC	PDF	INTER
62	2000		BT challenge workshops to adopt, adapt or abandon opportunities (June, September, October 2000)	DOC	PPOINT	CD
63	2000	Sep	BT timeline for change mentions five organisational needs to address (September 2002)	DOC	PPOINT	CD
64	2000	Oct	BT summary opportunities presented to challenge panel: knowledge capability and knowledge communities (October 2000)	DOC	PPOINT	CD
65	2000	Dec	Initial BT blueprint of 44 projects approved for implementation (December 2000)	DOC	WORD	CD
66	2000	Dec	BT 'toolkit of processes and approaches for implementation' included in blueprint (December 2000)	DOC	WORD	CD
67	2001	Jan	BT roles and responsibilities approved (January 2001)	DOC	PPOINT	CD

68	2001	Apr	Scottish Executive change PuSA's agencies from private companies to subsidiaries of HQ (April 2001)	INTRA	HTML	CD
69	2001	Apr	Target date for introducing KM information system (April 2001)	DOC	WORD	CD
70	2001	May	BT Standard Extra document May 2001 mentions 'KM' projects: CoP's, intranet, k-packs (May 2001)	DOC	PDF	CD
71	2001	Jul	BT Knowledge Workstream (introduced July 2001)	DOC	PPOINT	CD
72	2001	Jul	Deloitte and Touche management consultants appointed (July 2001)	WEB	PDF	INTER
73	2001	Jul	BT 'unscheduled period of re-consideration' to 'clarify scope and scale of what was achievable' (July 2001)	WEB	PDF	INTER
74	2001	Jul	BT 'KM' projects (CoP's, intranet and k-packs) relabelled 'Knowledge Working' (July 2001)	INTRA	HTML	CD
75	2001	Nov	Final BT blueprint of 23 projects approved for implementation by PuSA board (November 2001)	DOC	PDF	INTER
76	2001		BT HQ senior management detailed agenda paper (2001)	DOC	WORD	CD
77	2001	Nov	BT project document mentions BT implementation/ KW projects experimentation begins (November 2001)	DOC	WORD	CD
78	2001	Dec	BT CoP's presentation (December 2001)	DOC	PPOINT	CD
79	2001		BT K-packs presentation (2001)	DOC	PPOINT	CD
80	2001		BT intranet pages: managing our knowledge; KW project overview;	INTRA	HTML	CD

			individual KW projects (CoPs, intranet, k-packs) (2001)			
81	2002		BT visioning presentation: sparking ideas; radical change (2002)	DOC	PPOINT	CD
82	2002	May	Future-state operating model released with specialist services structure to include Knowledge Analysts (May 2002)	DOC	PPOINT	CD
83	2002	May	Knowledge Analyst job description approved as part of operating model: centralised-decentralised role (May 2002)	DOC	WORD	CD
84	2002	May	BT Standard Extra document May 2002 mentions CoP pilot communities, CoP diagnostic tools, and network-wide staff roles (May 2002)	DOC	PDF	CD
85	2002	Jun	BT development of CoPs paper: mentions objective of 'achieving a single network' (June 2002)	DOC	WORD	CD
86	2002	Jul	Futures thinking conference paper written by three PuSA staff members (July 2002)	DOC	WORD	INTER
87	2002	Aug	KA briefing pack document (training; role; behaviours; CoP; work). Questions to be answered: What is my local role? What is my national role? Who is my boss - the biggest question of all (August 2002)	DOC	WORD	CD
88	2002	Aug	PuSA Intranet 2 launched (August 2002)	DOC	WORD	CD
89	2002	Sep	KA perform guidance 02/03 drafted by Knowledge Workstream (September 2002)	DOC	WORD	CD
90	2002	Sep	BT roundup newsletter to PuSA senior managers mentions Knowledge	DOC	PDF	CD

			Analyst induction (September 2002)			
91	2002	Oct	'One network' presentation with 'managing our knowledge' mentions KA's and tools (CoPs, k-packs, intranet) (October 2002)	DOC	PPOINT	CD
92	2002	Oct	KW strategy document with task force roles approved by HQ senior management: driver 'one network' working (October 2002)	DOC	WORD	CD
93	2002	Oct	Knowledge architecture document approved by HQ senior management (October 2002)	DOC	WORD	CD
94	2002	Nov	BT roundup newsletter to PuSA senior managers mentions knowledge Analysts in post and role expectations (November 2002)	DOC	PDF	CD
95	2002	Nov	Community Development tool available to support CoP development (November 2002)	DOC	WORD	CD
96	2002	Nov	Cynefin Modelling tool available to support CoP development (November 2002)	DOC	WORD	CD
97	2002	Nov	Business Needs Analysis tool available to support CoP development (November 2002)	DOC	WORD	CD
98	2002	Nov	Social Capital Analysis tool available to support CoP development (November 2002)	DOC	WORD	CD
99	2002	Nov	Social Network Analysis tool available to support CoP development (November 2002)	DOC	WORD	CD

100	2002	Nov	Archetypes technology tool available to support CoP development (November 2002)	DOC	WORD	CD
101	2002	Nov	Ashen Technique tool available to support CoP development (November 2002)	DOC	WORD	CD
102	2002	Nov	Narrative Technique tool available to support CoP development (November 2002)	DOC	WORD	CD
103	2002	Nov	K-Packs tool available to support CoP development (November 2002)	DOC	WORD	CD
104	2002	Nov	KW barriers and enablers Design Authority presentation: commitment yet to be fully demonstrated; other business pressures restricting recruitment to all posts; some alienation from change programme; CoPs and k-packs promise much but require resources to establish and maintain them (November 2002)	DOC	WORD	CD
105	2002	Nov	KAs recruited: Sarah, Ashcroft; Jane, Berwick; Alison, Carnegie; Bonni, Dunstane; Arthur, Glenview; Gail, Newton; Helen, Rosslea (November 2002)	DOC	HTML	CD
106	2002	Nov	Informal KA monthly meetings established to share implementation experiences	DOC	WORD	CD
107	2002	Nov	KW meeting output re: hopes and fears: will KW team disappear? Lack of clarity about work and scope (November 2002)	DOC	WORD	CD

108	2002	Dec	Role of KAs in PuSA presentation: KW champions; business analysis; community development; intranet and k-pack roll-out (December 2002)	DOC	PPOINT	CD
109	2003	Jan	KW discussion group introduced (November 2002)	WEB	HTML	INTRA
110	2003	Jan	KA communications planning (January 2003)	DOC	WORD	CD
111	2003	Jan	KW intranet page: a day in the life of a KA (January 2003)	INTRA	HTML	CD
112	2003	Jan	All Staff 'One Network' workshops (January 2003)	DOC	WORD	CD
113	2003	Feb	What is KW? Design Authority clarification paper (February 2003 later revised February 2004)	DOC	WORD	INTRA
114	2003	Feb	KM value Design Authority paper: BT overall emphasis on efficiency; customer service, network cohesion - achieved through KW. Ideas on how to measure value: lessons learned process; user surveys of culture change; benchmarking KM processes; measuring intangibles; balanced scorecard. KW Team requires means of assessing and reporting on the value of knowledge initiatives, and the contribution to overall cultural change (February 2003)	DOC	WORD	INTRA
115	2003	Mar	Role of KAs in PuSA presentation: KW cross-cutting initiatives to deliver a 'one network' approach to our work; priority to support intranet roll-out; key challenge finding the balance between local and national demands (March 2003)	INTRA	PPOINT	CD

116	2003	Mar	On a news item on the Intranet Knowledge Analysts are described as 'catalysts to bring about a change in culture within PuSA – a culture of Knowledge Working' (PuSA, 2003f).	INTRA	HTML	CD
118	2003	Apr	KW Team recruited (formal structure comprises BT Knowledge Workstream members) (April 2003)	DOC	WORD	CD
119	2003	Apr	KW Team incorporated into KM Directorate (April 2003)	DOC	WORD	CD
120	2003	Apr	KAs recruited: Ross, HQ; Lorna, Strathyre; Kyle, Kirklea	DOC	WORD	INTRA
121	2003	Apr	KA additional recruitment: Bonni, HQ	INTRA	HTML	INTRA
122	2003	Apr	Role of KA in subsidiaries draft presentation developed (April 2003)	DOC	PPOINT	INTRA
123	2003	Apr	PuSA intranet 3 launch delayed till December 2003	DOC	WORD	INTRA
124	2003	Apr	PuSA 'Big Picture Story' presentation re: one network working circulated to PuSA staff (April 2003)	DOC	PDF	CD
125	2003	May	Cynefin Modelling technology guidance introduced (May 2003)	DOC	WORD	CD
126	2003	May	Business Needs Analysis guidance introduced (May 2003)	DOC	WORD	CD
127	2003	May	Social Capital Analysis guidance introduced (May 2003)	DOC	WORD	CD
128	2003	May	Archetypes guidance introduced (May 2003)	DOC	WORD	CD
129	2003	May	Ashen Technique guidance introduced (May 2003)	DOC	WORD	CD
130	2003	May	Narrative Technique guidance introduced (May 2003)	DOC	WORD	CD
131	2003	May	BT CoP community dynamics presentation (May 2003)	DOC	PPOINT	CD

132	2003	May	BT CoP communities in PuSA: the background story (May 2003)	DOC	PDF	CD
133	2003	May	PuSA internal audit final review of BT benefits published (May 2003)	DOC	WORD	CD
134	2003	May	BT programme closure paper presented to BT Board (May 2003)	DOC	WORD	CD
135	2003	May	BT roundup newsletter to all PuSA staff re: end of BT programme (May 2003)	DOC	PDF	CD
136	2003	Jun	KA away day: lack of defined KA role; need clarification of KA role; where does the KA role start and stop? Can't get on with the job till the intranet launches (June 2003)	DOC	WORD	INTRA
137	2003	Jun	BT programme 2 officially ends (June 2003)	WEB	PDF	INTER
138	2003	Jun	PuSA HQ CEO 2 resigns (June 2003)	WEB	HTML	INTER
139	2003	Jun	Marlene starts developing knowledge needs route map process with IBM Consultant (June 2003)	DOC	WORD	INTER
140	2003	Jun	KW meeting outputs shows that KA role needs clarification (June 2003)	DOC	WORD	INTER
141	2003	Jun	In Hopetoun subsidiary KA job interview Louise was told, if she got the job, she would have to give them 'a steer' on what the KA role entailed.	FIELD	WORD	OBS
142	2003	Jul	CEO 3 email to all PuSA staff about reviewing polices and procedures	EMAIL	OUT	PEA
143	2003	Jul	KAs recruited: Louise, Hopetoun; Niel, Wallace (July 2003)	FIELD	WORD	OBS
144	2003	Aug	Marlene introduces KA weekly updates (August 2003)	EMAIL	OUT	PEA

145	2003	Aug	CoP development guidance introduced (August 2003)	DOC	PDF	INTRA
146	2003	Aug	Isla recruited into KW Team MM (August 2003)	DOC	WORD	PEA
147	2003	Aug	Knowledge needs route map first draft complete but needs more work WU (August 2003)	DOC	WORD	PEA
148	2003	Aug	KA work plans: KAs told to produce monthly report of activities in word format (August 2003)	EMAIL	OUT	PEA
149	2003	Aug	Document Management: KAs told they will be involved in design, build and implementation MM (August 2003)	DOC	WORD	PEA
150	2003	Aug	Intranet: clarify role of Intranet Area Manager (August 2003)	EMAIL	OUT	PEA
151	2003	Aug	Internet: question whether KAs will help to role out business implementation plan (August 2003)	EMAIL	OUT	PEA
152	2003	Aug	K-Packs: currently 6 but content updating required and focus groups to revise approach (August 2003)	EMAIL	OUT	PEA
153	2003	Aug	KW fact sheets to be produced by KW Team (August 2003)	DOC	OUT	PEA
154	2003	Aug	Development of KW questions KAs to ask subsidiary staff (August 2003)	DOC	WORD	PEA
155	2003	Aug	Stakeholder plans: KAs to develop their own (August 2003)	EMAIL	OUT	PEA
156	2003	Aug	Mind manager and visio training held (August 2003)	DOC	WORD	PEA
157	2003	Sep	KW CoP two-day development workshop held	DOC	WORD	INTRA
158	2003	Sep	KA hopes and fears: fear lack of clarity over local vs network priorities; hope we can match local and national knowledge requirements (September	DOC	WORD	INTRA

			2003)			
159	2003	Sep	KA hopes and fears: further delays to the intranet has damaged reputation following investment of large amounts of time (September 2003)	DOC	WORD	INTRA
160	2003	Sep	KA hopes and fears: fear lack of awareness of KW; hope we can demonstrate the benefits; fear business may never understand KW (September 2003)	DOC	WORD	INTRA
161	2003	Sep	KA hopes and fears: KNRM originally smacked of men and consultancy; fear lack of availability of tools; fear difficulty of applying KNRM in business (September 2003)	DOC	WORD	INTRA
162	2003	Sep	KA hopes and fears: fear not having time to learn about KW (September 2003)	DOC	WORD	INTRA
163	2003	Sep	KA hopes and fears: fear PuSAs structure does not support KW culture (September 2003)	DOC	WORD	INTRA
164	2003	Sep	After action review tool and guidance available (September 2003)	DOC	WORD	PEA
165	2003	Sep	Records management: expert group involvement but implications for all KAs (September 2003)	DOC	WORD	PEA
166	2003	Sep	KA additional recruitment: Tracey, Dunstane (September 2003)	EMAIL	OUT	PEA
167	2003	Sep	Formal KA monthly meeting introduced (September 2003)	EMAIL	OUT	PEA
168	2003	Sep	KA line managers meeting introduced (September 2003)	EMAIL	OUT	PEA

169	2003	Sep	Isla and Marlene agreed at line managers meeting to report on KA performance (September 2003)	DOC	WORD	PEA
170	2003	Oct	KW Team developing their own balanced scorecard (October 2003)	EMAIL	OUT	PEA
171	2003	Oct	Action Based Learning tool and guidance introduced (October 2003)	DOC	WORD	INTRA
172	2003	Oct	Stakeholder planning tool and guidance introduced (October 2003)	EMAIL	OUT	PEA
173	2003	Oct	How KM is applied at PuSA? Conference Paper (October 2003)	WEB	WORD	INTER
174	2003	Oct	Marlene/Isla introduces 1:1 meetings with KA line managers and KA's: these are held separately (October 2003)	EMAIL	OUT	PEA
175	2003	Oct	KA perform: recommended generic objectives (October 2003)	EMAIL	OUT	PEA
176	2003	Oct	KA stakeholder plans: template for guidance produced (October 2003)	EMAIL	OUT	PEA
177	2003	Oct	Document Management/ Freedom of Information: clarify KA role (October 2003)	EMAIL	OUT	PEA
178	2003	Oct	CRM - what is KA role? (October 2003)	EMAIL	OUT	PEA
179	2003	Oct	Touchpaper: investigating logging system for KA customers WU MM (October 2003)	DOC	OUT	PEA
180	2003	Sep	KW team resource document: blockages identified (September 2003)	DOC	WORD	INTRA
181	2003	Sep	Intellectual assets: KAs told to contribute to register WU (October 2003)	EMAIL	OUT	PEA

182	2003	Oct	Tacit pipeline spreadsheet of tacit activities developed WU (October 2003)	DOC	WORD	PEA
183	2003	Oct	KA development plan with expert groups: individuals will not be able to deliver all solutions for next 12-15 months) (October 2003)	DOC	WORD	PEA
184	2003	Oct	After action review guidance presentation on HQ KW shared drive (October 2003)	DOC	WORD	SDR
185	2003	Oct	Email from Isla: facilitation skills training cancelled due to lack of numbers (October 2003)	EMAIL	OUT	PEA
186	2003	Oct	Email from Marlene: expert groups are continuing till August 2004 (Tacit, Narrative, DocMan/Metadata, Explicit) (October 2003)	EMAIL	OUT	PEA
187	2003	Oct	Intranet obtree superuser training (October 2003)	DOC	WORD	PEA
188	2003	Oct	Mark post on discussion group re: where next? to 'understand better the local set-up, local priorities, meet the management team and in spending time with a few staff working on key projects and areas of the business' - already spent time in Carnegie, Ashcroft and Glenview	EMAIL	OUT	DISG
189	2003	Nov	KA work plan: spreadsheet developed to capture KA joint, local and developmental activities (November 2003)	EMAIL	OUT	PEA
190	2003	Nov	Alignment of KAs to CoPs (where KA is a member or led by subsidiary) (November 2003)	DOC	WORD	PEA
191	2003	Nov	CRM information gathering exercise (November 2003)	EMAIL	OUT	PEA

192	2003	Nov	Expert talks relabelled 'business improvement series' (November 2003)	EMAIL	OUT	PEA
193	2003	Nov	Perform: KAs to use generic descriptions on KA role and adapt of their own needs (November 2003)	EMAIL	OUT	PEA
194	2003	Nov	KM Guru Gordon McDermott presentation (November 2003)	DOC	PPT	INTRA
195	2003	Nov	Intranet area manager training (November 2003)	DOC	WORD	PEA
196	2003	Nov	Influencing for results training held (November 2003)	DOC	WORD	PEA
197	2003	Nov	HQ KW Team shared drive (KAs given access) (November 2003)	EMAIL	OUT	PEA
198	2003	Nov	Mark email to Louise (cc Isla and Marlene) shows outdated generic all staff performance guidelines (November 2003)	EMAIL	OUT	PEA
199	2003	Dec	Knowledge needs route map process development complete: includes guidance (Dec 2003)	DOC	WORD	PEA
200	2003	Dec	Marlene/Isla told the KAs not to mention the route map to staff as this was purely a methodological approach (December 2003)	FIELD	WORD	OBS
201	2003	Dec	PuSA intranet launch and guidance introduced WU (Dec 2003)	DOC	WORD	PEA
202	2003	Dec	KW CoP intranet pages: development begins (Dec 2003)	DOC	WORD	PEA
203	2003	Dec	Balanced Scorecard: new HQ BSc staff member will be involving KAs locally MM (Dec 2003)	DOC	WORD	PEA
204	2003	Dec	Freedom of Information (KAs ask for contacts to be confirmed by CEOs)	EMAIL	OUT	PEA

			(Dec 2003)			
205	2003	Dec	KA's work plan: how to complete guidance available MM (Dec 2003)	DOC	WORD	PEA
206	2003	Dec	Communications planning training held (Dec 2003)	DOC	WORD	PEA
207	2003	Dec	Mind Manager and Visio Training held (Dec 2003)	DOC	WORD	PEA
208	2004	Jan	In KA weekly update Marlene asks KAs to choose two projects to discuss at KA monthly meetings and were told: you may wish to consider the following: any network-wide implications or examples of best practice; use of KW tools to support the project, next stages, and support you may require to ensure completion'	DOC	WORD	PEA
209	2004	Jan	KA recruited: Eva, Mallard (January 2004)	EMAIL	OUT	PEA
210	2004	Jan	KA hopes and fears: fear role not clear; fear being pulled into local value add activities; not sure if we are doing what is expected of us?; fear role is viewed as a joke; fear job role is going to spiral out of control (January 2004)	DOC	WORD	INTRA
211	2004	Jan	Presentation skills training held (January 2004)	DOC	WORD	PEA
212	2004	Jan	KA work plan: KAs told to populate (January 2004)	DOC	WORD	PEA
213	2004	Jan	HR change initiatives: KA involvement required; HR initiatives to be launched next year but do not know what these are (January 2004)	EMAIL	OUT	PEA
214	2004	Jan	Success stories: KAs to contribute to discussion forum (January 2004)	DOC	WORD	PEA

215	2004	Jan	Intranet: clarify KA role requirements (January 2004)	EMAIL	OUT	PEA
216	2004	Jan	K-Packs: minimum criteria agreed for development (January 2004)	DOC	WORD	PEA
217	2004	Feb	KA additional recruitment: Tracey, Rosslea (February 2004)	DOC	WORD	PEA
218	2004	Feb	Monthly meetings to focus on activities (KAs to report on two local projects) (February 2004)	EMAIL	OUT	PEA
219	2004	Feb	What is KW? Design Authority Paper (2003 revised paper)	DOC	WORD	INTRA
220	2004	Feb	PuSA HQ CEO 3 starts (February 2004)	EMAIL	OUT	PEA
221	2004	Feb	Internet: KAs not to train internet area managers but HQ meeting with some KAs re: copywriting (February 2004)	DOC	WORD	PEA
222	2004	Feb	Social Network Analysis: Ross presented presentation of SNA he gave at Ark Conference (February 2004)	DOC	WORD	PEA
223	2004	Feb	Design Authority outputs: KAs to be trained to undertake After Action Reviews, Action Based Learning and Knowledge Transfer Interviews (February 2004)	DOC	WORD	PEA
224	2004	Feb	Plain English training held (February 2004)	DOC	WORD	PEA
225	2004	Mar	Hopetoun subsidiary balanced scorecard places emphasis on developing effective cross-team working	DOC	WORD	PEA
226	2004	Mar	The majority of KAs have not had an opportunity to 'shadow' on the tacit tools yet (March 2004)	FIELD	WORD	OBS

227	2004	Mar	Discussion group: a KW Team decision (with approval from Knowledge Analysts) that this be opened up to all members of the KW CoP in March 2004	EMAIL	OUT	PEA
228	2004	Mar	Stakeholder plans: KAs reminded to produce their own plans (March 2004)	DOC	WORD	PEA
229	2004	Mar	PuSA review of project approval processes begins (March 2004)	EMAIL	OUT	PEA
230	2004	Mar	Intranet: KAs to provide subsidiary management with review of progress (March 2004)	DOC	WORD	PEA
231	2004	Mar	KA monthly meeting: Isla/Marlene told the KA's stakeholders thought their 'level of engagement' in KW activities was inadequate, and were concerned about the perceived 'lack of delivery' (March 2004)	DOC	WORD	PEA
232	2004	Mar	KA Role in CRM to be clarified (March 2004)	DOC	WORD	PEA
233	2004	Mar	KAs to review membership of local staff in CoPs (March 2004)	DOC	WORD	PEA
234	2004	Mar	Buddy list: KAs to keep buddy updated on KA/KW developments (March 2004)	DOC	WORD	PEA
235	2004	Mar	Subsidiary Operating Plan Review: KAs to review local operations plans and identify KW opportunities (March 2004)	DOC	WORD	PEA
236	2004	Mar	Web trends first report expected May (March 2004)	DOC	WORD	PEA

237	2004	Mar	Records Management: KAs to recommend actions to prepare for records management (March 2004)	DOC	WORD	PEA
238	2004	Mar	CRM: KA role in CRM clarified and KAs to receive training for 'back up' (March 2004)	DOC	WORD	PEA
239	2004	Mar	Facilitation, consulting and communication skills training held (March 2004)	DOC	WORD	PEA
240	2004	Mar	Web trends training held (March 2004)	DOC	WORD	PEA
241	2004	Mar	In an email to Louise Marlene provides advice on the allocation of pan-organisational role. She suggests the KAs provide strategic guidance.	EMAIL	WORD	PEA
242	2004	Mar	Isla told KAs stakeholders have concerns re: KA performance at KA monthly meeting. Suggests KAs prepare for staff consultations by requesting subsidiary balanced scorecards (March 2004)	DOC	WORD	PEA
243	2004	Mar	In an email to KAs Ross mentions 'touting for business' to identify local priorities.	EMAIL	OUT	PEA
244	2004	Mar	Mark posts message on the KW discussion group re: establishing a group to look at measuring KW (March 2004)	EMAIL	OUT	DISG
245	2004	Mar	Isla discussion post re: clarification of KA role in developing summaries of the operating plan content. She said: 'the confusion seems to have arisen because somewhere, someone said that their Knowledge Analyst collated this info' (March 2005)	EMAIL	OUT	DISG

246	2004	Mar	In a telephone conversation with Louise Tracey mentions that she is concerned to be delivering an after action review session of a major subsidiary project that she considers 'a shambles' and 'politically sensitive' after only one shadowing opportunity.	FIELD	WORD	OBS
247	2004	Apr	Louise set up East Coast balanced scorecard meetings: subsidiaries perpetuating myth it being used	EMAIL	OUT	PEA
248	2004	Apr	KA additional recruitment: Kirsty, Rosslea; Shona, HQ (April 2004)	DOC	WORD	PEA
249	2004	Apr	In an email to Louise Gail mentions that this has been the worst two years of her career thus far (April 2004)	EMAIL	OUT	PEA
250	2004	Apr	Product managers: KAs to discuss how to provide added value to the product development process (April 2004)	DOC	WORD	PEA
251	2004	Apr	CRM: KAs should be involved (April 2004)	DOC	WORD	PEA
252	2004	Apr	Reports to management: KAs should be producing monthly reports (April 2004)	DOC	WORD	PEA
253	2004	Apr	Operational shadowing: KAs to gain in-depth understanding of the business and its knowledge requirements (April 2004)	DOC	WORD	PEA
254	2004	Apr	Extranets: should be available April 2004	DOC	WORD	PEA
255	2004	Apr	Records management programme officially begins as records manager in post (April 2004)	DOC	WORD	PEA
256	2004	Apr	Social network analysis tool: to review process (April 2004)	EMAIL	OUT	PEA

257	2004	Apr	Knowledge capture tool and guidance introduced (April 2004)	DOC	WORD	INTRA
258	2004	Apr	COP development: updated KA alignment to CoPs sent out (April 2004)	DOC	WORD	PEA
259	2004	Apr	Best practice folder in HQ KW shared drive created to post examples of KA management papers (April 2004)	EMAIL	OUT	SHD
260	2004	Apr	Knowledge transfer interview tool draft guidance produced (April 2004)	DOC	WORD	INTRA
261	2004	Apr	KM Guru Melissie Clemmons-Rumizen presentation (April 2004)	DOC	WORD	INTRA
262	2004	Apr	Intranet case presented externally www.eimagazine.com and www.ikmagazine.com (April 2004)	WEB	PDF	INTER
263	2004	Apr	Social network analysis tool presented at Ark Group conference (April 2004)	DOC	WORD	PEA
264	2004	Apr	Isla/Marlene start identifying "hooks" we need to start talking with colleagues about KW opportunities' (July 2004)	EMAIL	OUT	PEA
265	2004	Apr	Isla/Marlene 'hook' suggestion: KA's to introduce themselves to their product managers and explore the software they used in product development process.	EMAIL	OUT	PEA
266	2004	May	In conversation with subsidiary Business Director Louise discusses subsidiary culture and CEO's opinion to change (why change anything if its not broken?). Louise mentions using SNA to measure effectiveness of cross-team working (a balanced scorecard initiative)	FIELD	WORD	OBS

267	2004	May	After Action Reviews an important area of activity over next few months (May 2004)	DOC	WORD	PEA
268	2004	May	Social Network Analysis tool guidance now available on intranet (May 2004)	DOC	WORD	INTRA
269	2004	May	Email to Louise from Marlene shows that KW Team only has 5 licenses for social network analysis software (May 2004)	EMAIL	OUT	PEA
270	2004	May	CoPs guidance on role of KA and delivering CoP workshops sent out (May 2004)	DOC	WORD	PEA
271	2004	May	Subsidiary Operating Plan Review: KAs should now have identified 6 month operations plan activities (May 2004)	DOC	WORD	PEA
272	2004	May	KA first line managers meeting held (May 2004)	DOC	WORD	PEA
273	2004	May	KA additional recruitment: Kylea, Dunstane (May 2004)	FIELD	WORD	OBS
274	2004	Jun	In a conversation with Louise Alison admits that Carnegie subsidiary does not believe in Knowledge Working (June 2004)	FIELD	WORD	OBS
275	2004	Jun	In email to Louise Arthur comms 'what we really need to do [during KA meetings] is talk about what we've actually been doing... ' (June 2004)	EMAIL	OUT	PEA
276	2004	Jun	In Louise/Isla 1:1 Isla admonishes Louise for suggesting a KW tool without following knowledge needs route map process	FIELD	WORD	OBS

277	2004	Jun	Louise has conversation with Hopetoun HR about using proposed staff representative group as forum for identifying local problems/needs	FIELD	WORD	OBS
278	2004	Jun	Hopetoun subsidiary CEO sends email to all staff about formation of a new staff representative group.	EMAIL	OUT	PEA
279	2004	Jun	A Hopetoun Growing Business Director mentions to Louise that her role 'must have been lonely and frustrating as no real direction was given'. (June 2004)	FIELD	WORD	OBS
280	2004	Jun	KA additional recruitment: Jessie, Carnegie (June 2004)	DOC	WORD	PEA
281	2004	Jun	Various KW 'tools and methods' presented at www.synchroni.co.uk conference (June 2004)	WEB	HTML	INTRA
282	2004	Jun	Communities 'tool-kit' presented at KM forum (June 2004)	WEB	HTML	INTRA
283	2004	Jun	In email to Louise Isla says that it is very important to focus on local agenda; not to facilitate any additional sessions; reduce days away from the office (June 2004)	EMAIL	OUT	PEA
284	2004	Jun	PuSA change: review of projects and programmes, finance and procurement processes and procedures (June 2004)	EMAIL	OUT	PEA
285	2004	Jun	Extranets: 10 pilots to be run between June 2004 and August 2004	DOC	WORD	PEA
286	2004	Jun	Social network analysis tool guidance introduced (June 2004)	DOC	WORD	INTRA
287	2004	Jun	Knowledge Transfer/ Exit Interviews tools: KAs should be able to deliver	DOC	WORD	PEA

			from June 2004 (MM)			
288	2004	Jun	Emails between Louise, Gail, Niel, Arthur re: meeting with KW CoP sponsor in August 2004	EMAIL	OUT	PEA
289	2004	Jun	Intellectual Assets (KAs reminded to contribute to register of IA's) (June 2004)	EMAIL	OUT	PEA
290	2004	Jun	KW CoP Development Workshop: (1) in a conversation with Louise Jessie and Alana mentioned that they only discovered they were allocated the KA role when they received a weekly KA update email; (2) some KAs thought 1:1 meetings were used to 'sell' activities KAs should be involved in (June 2004)	FIELD	WORD	OBS
291	2004	Jun	In a conversation with Louise, Gail mentions Isla told her she was 'now an expert facilitator' after helping to facilitate a recent CoP development workshop (June 2004)	FIELD	WORD	OBS
292	2004	Jun	Knowledge Transfer and Action Based Learning (after training KAs to identified areas to deploy this and After Action Reviews) (June 2004)	DOC	WORD	PEA
293	2004	Jun	KA development day to focus on Careers Services activities (June 2004)	DOC	WORD	PEA
294	2004	Jun	After Action Reviews/ Action Based Learning training (June 2004)	DOC	WORD	PEA
295	2004	Jun	KM Guru Etienne Wenger presentation (June 2004)	DOC	WORD	INTRA

296	2004	Jul	Email exchange between Louise and subsidiary director re: 'health' of partnerships (partnership working is a balanced scorecard initiative)	EMAIL	OUT	PEA
297	2004	Jul	Isla email to KAs confirms no generic performance guidance will be given as KAs 'have tasks apart from, although mostly aligned to, the KA role' (July 2004).	EMAIL	OUT	PEA
298	2004	Jul	In a conversation with Louise Kyle mentions he was given the KA role on his return from a BT secondment.	FIELD	WORD	OBS
299	2004	Jul	In a telephone conversation with Louise Tracey mentions that she decided to leave PuSA as the KA role 'was not going anywhere' and was 'not contributing to [her] CV'.	FIELD	WORD	OBS
300	2004	Jul	PuSA Business Improvement change agenda announced (34 initiatives 150 PuSA staff): including reviewing KM/KW structure (July 2004)	EMAIL	OUT	PEA
301	2004	Jul	Intellectual assets: KAs to identify (July 2004)	DOC	WORD	PEA
302	2004	Jul	Intranet consultant commissioned to improve search facility (July 2004)	DOC	WORD	PEA
303	2004	Jul	Operational shadowing (KAs asked to make every effort to do this) (July 2004)	DOC	WORD	PEA
304	2004	Jul	Email to Louise from Gail shows that subsidiary line managers were talking to the KW team, and vice versa re: individuals' performance (July 2004)	EMAIL	OUT	PEA

305	2004	Aug	Marlene/Isla 'hook' suggestion re: major projects approval process changes announced on intranet. KA's told this is an area where you can work with colleagues locally to embed this (August 2004)	DOC	WORD	PEA
306	2004	Aug	A conversation with Isla re: meeting with Hopetoun CEO reveals he thought KW was 'adding more to the job' and was preoccupied with 'time, time, time'	FIELD	WORD	OBS
307	2004	Aug	Louise has to explain to Hopetoun CEO and KA line manager that Marlene/Isla's KA resource graph is not an accurate reflection of the KA subsidiary role	FIELD	WORD	OBS
308	2004	Aug	In a 1:1 meeting with Marlene/Louise discuss resourcing issues: Marlene mentioned the KW Team could not deliver what they had promised with current resources; when Louise asked if she could introduce resourcing at a KW CoP meeting in August 2004 Marlene said 'please do'.	FIELD	WORD	OBS
309	2004	Aug	In an email to other KAs Louise suggests a 'quick audit of time allocated for Knowledge Analyst activities and other 'hats you wear''	EMAIL	OUT	PEA
310	2004	Aug	Email from KW Team member to Louise, Kyle, and Kirsty re: setting up geographical k-packs (August 2004)	EMAIL	OUT	PEA
311	2004	Aug	Marlene/Isla 'hook' suggestion re: Carnegie customer satisfaction forum. KA's told 'this is an example of activity happening across PuSA where the role of the KA can provide and demonstrate added value'. (August 2004)	DOC	WORD	PEA

312	2004	Aug	Emails between Louise, Gail, Niel discuss KA meeting with KW CoP sponsor: usual PR stunt; sell positive nature of our role (August 2004)	EMAIL	OUT	PEA
313	2004	Aug	KA's meeting with KW CoP Sponsor: Louise presents KA task matrix to discuss diverse KA roles; KAs agree with sponsor that there is little career progression in KA role (August 2004)	FIELD	WORD	OBS
314	2004	Aug	During KW CoP sponsor meeting Marlene discusses subsidiary operating model with KAs	FIELD	WORD	OBS
315	2004	Aug	In a telephone conversation with Louise re: KA resource graph Isla mentions there will be different perceptions of Knowledge Working depending on: what the Knowledge Analysts thought their role was; what subsidiary senior management perceived their role to be; and subsidiary circumstances. She did not think the KA task portfolio Louise developed in conjunction with other KA's provided an accurate picture of subsidiary KW work as 'all work' was KW work (August 2004).	FIELD	WORD	OBS
316	2004	Aug	In a telephone conversation with Louise re: KA resource graph Marlene says that this does not match the KA resource graph they had developed earlier based on conversations they had with KA's regarding their role (August 2004)	FIELD	WORD	OBS

317	2004	Aug	At a monthly KA meeting Isla mentions that she and Marlene produced the KA resource graph, and presented it to subsidiary senior management, to try and secure Knowledge Analyst resources for Knowledge Working activities	FIELD	WORD	OBS
318	2004	Aug	Best Practice Pilot Introduced (August 2004)	DOC	WORD	PEA
319	2004	Aug	Knowledge Market tool and guidance introduced (August 2004)	DOC	WORD	INTRA
320	2004	Aug	KW Team purchases web trends software (August 2004)	DOC	WORD	INTRA
321	2004	Aug	Expert groups run their course (3 of 4 complete) in August 2004	DOC	WORD	PEA
322	2004	Aug	CoP development approach training held: KW team CoP facilitator mentions that she worked with IBM consultants for a year before facilitating a CoP workshop on her own (August 2004)	DOC	WORD	PEA
323	2004	Aug	KW Team Records Manager Recruited (August 2004)	DOC	WORD	PEA
324	2004	Aug	Isla/Marlene will hold 1:1 meetings with KAs on a quarterly basis (August 2004)	DOC	WORD	PEA
325	2004	Aug	Kirklea's KA line manager says he is 'not interested in [Isla and Marlene] playing us off against one another'	EMAIL	OUT	PEA
326	2004	Aug	Louise discontinues use of KW spreadsheet (with approval from line manager) because only 3 of 14 KA's were updating it.	FIELD	WORD	OBS

327	2004	Sep	Generic communications plans: KAs to develop (September 2004)	DOC	WORD	PEA
328	2004	Sep	KW CoP intranet site development complete: on the front page it says 'outwith [PuSA] there are other explanations that define what working with knowledge is all about' (KW, 2006 p.1) (September 2004)	EMAIL	OUT	PEA
329	2004	Sep	Mark emails KW survey re: operating model/ KA skills to subsidiary CEO, KA Directors, KA line managers and KA's (September 2004)	EMAIL	HTML	PEA
330	2004	Sep	PuSA CRM deployment begins (September 2004)	DOC	WORD	PEA
331	2004	Sep	Email from Marlene to KAs re: business analysis training, and emails between KAs in response. In one email Sarah said: 'I don't recall having seen descriptors for any of the so-called 'core' training courses. Seems to be a case of turning-up on the day, then deciding if it's relevant!'	EMAIL	OUT	PEA
332	2004	Sep	In an email to Hopetoun's CEO the KA line manager hopes to recruit for a 'full value post within the strategy team [...] which will cover elements of the knowledge working agenda' (September 2004).	EMAIL	OUT	PEA
333	2004	Oct	KA additional recruitment: Louise (October 2004)	FIELD	WORD	OBS
334	2004	Oct	Touchpaper training held (October 2004)	DOC	WORD	PEA
335	2004	Oct	Action Based Learning and Knowledge Capture training for those who couldn't attend in June postponed (October 2004)	DOC	WORD	PEA
336	2004	Oct	Business analysis training (October 2004)	DOC	WORD	PEA

337	2004	Oct	Extranet guidance introduced (October 2004)	DOC	WORD	INTRA
338	2004	Nov	Scottish Executive's refreshed strategy for economic development launched (November 2004)	DOC	PDF	INTER
339	2004	Nov	Metropolitan city regions presented at PuSA annual public meeting (November 2004)	EMAIL	OUT	PEA
340	2004	Nov	Navigating the Knowledge Economy Training postponed (November 2004)	DOC	WORD	PEA
341	2004	Nov	GM Guru Karl-Erik Sveiby presentation (November 2004)	DOC	PPT	INTRA
342	2004	Nov	Mind Manager and Visio ICT access given to KAs (November 2004)	DOC	WORD	PEA
343	2004	Dec	Action Based Learning, After Action Reviews, Knowledge Capture outputs to be collated (December 2004)	DOC	WORD	PEA
344	2004	Dec	Isla and Marlene buys each Knowledge Analyst a book: 'The complete idiot's guide to knowledge management' (December 2004)	FIELD	WORD	OBS
345	2005	Jan	Consultancy skills training for those who could not attend in March postponed (January 2005)	DOC	WORD	PEA
346	2005	Jan	Communications skills training for those who could not attend in March postponed (January 2005)	DOC	WORD	PEA
347	2005	Jan	Freedom of Information comes into force (January 2005)	WEB	HTML	INTRA
348	2005	Jan	HQ email to PuSA staff: HQ structure external consultation complete (January 2005)	EMAIL	OUT	PEA

349	2005	Jan	HQ Business Improvement Directorate established (January 2005)	EMAIL	OUT	PEA
350	2005	Jan	HQ email: PuSA 'financial crisis' in press (January 2005)	EMAIL	OUT	PEA
351	2005	Jan	HQ email: Metropolitan regions more consultation needed (January 2006)	EMAIL	OUT	PEA
352	2005	Feb	Subsidiary management team paper review of publishing practice (February 2005)	DOC	WORD	PEA
353	2005	Feb	Isla and Marlene role change: tacit support for CoPs (February 2005)	FIELD	WORD	OBS
354	2005	Feb	Mark posts KW survey results on the intranet: he recommends improving the existing operating model and exploring increased time commitment to KW activities; the survey also mentions that implementing KW tools is 'a baptism by fire'; and Marlene/Isla's 'command and control' approach to managing KA's (February 2005)	EMAIL	OUT	PEA
355	2005	Mar	In an email to KA colleagues re: KW survey recommendations Niel says: Same old guff then! What exactly does this mean? And what does this mean to [subsidiary] CEO's? They will be in the same position of having to fight with [HQ] over [KA] time commitments'	EMAIL	OUT	PEA
356	2005	Feb	KW CoP rationale and development paper complete (February 2005)	DOC	WORD	INTRA
357	2005	Feb	CoPs assessment by Richard McDermott: identify strategic intent; hold annual CoP review (February 2005)	DOC	WORD	PEA

358	2005	Feb	Navigating the knowledge economy training (February 2005)	DOC	WORD	PEA
359	2005	Feb	Email to Louise shows Gail's attempts to construct local social capital analysis questions (February 2005)	EMAIL	OUT	PEA
360	2005	Feb	PuSA sponsors KM (KW) medal at RGU University: press release (February 2005)	WEB	HTML	INTER
361	2005	Feb	In an email to Louise Niel says 'It appears my contact is ending 'cos I wasn't doing enough local stuff to justify [the] CEO's investment (let that be a lesson to you all!!!)'. (February 2005)	EMAIL	OUT	PEA
362	2005	Mar	Gail posts 'two days training and shadowing on a few workshops does not an expert facilitator make in my opinion' on discussion group (March 2005).	EMAIL	OUT	DISG
363	2005	Mar	Niel requested closed KA discussion group be set up (March 2005)	EMAIL	OUT	PEA
364	2005	Mar	Jane posts a discussion group message re: Mark's recommendations from KW survey to maintain the current operating model (March 2005).	EMAIL	OUT	DISG
365	2005	Mar	KA additional recruitment: Gordon (March 2005)	EMAIL	OUT	PEA
366	2005	Mar	Niel Knowledge Capture (left PuSA contract not renewed): barriers management structure; role credibility; role marketing; understanding of the term KM; decide whether centralised or decentralised (March 2005)	EMAIL	OUT	PEA
367	2005	Mar	Local Operating Plan Summary (KAs to pull together - query whether KA role?) (March 2005)	EMAIL	OUT	PEA

368	2005	Mar	Public sector information to be introduced July 2005 (March 2005)	EMAIL	OUT	PEA
369	2005	Mar	KM Guru Verna Allee presentation (March 2005)	DOC	PPT	INTRA
370	2005	Mar	Ideas Lab facilitation training (March 2005)	EMAIL	OUT	PEA
371	2005	Mar	KW CoP Meeting (March 2005)	DOC	OUT	INTRA
372	2005	Mar	CoPs summary assessment to HQ senior management: 13 active communities developed; recommendations: expand role; annual review; active sponsor; strategic intent; modest budget; 2-tier approach: support for informal and organic agenda; and influence policy and engage in business improvement.	DOC	OUT	INTRA
373	2005	Mar	In email to KAs from Marlene announces that KA meetings will take place bi-monthly (April 2005)	EMAIL	OUT	PEA
374	2005	Mar	In an email to Louise from Lorna re: recent KW CoP meeting: management teams pay lip service to KW	EMAIL	OUT	PEA
375	2005	Apr	All Staff Events 'Making A Difference, Making it Happen' (organisational restructuring formally announced) (April 2005)	FIELD	WORD	OBS
376	2005	Apr	KM Operating Plan 05-08 published (April 2005)	WEB	PDF	INTRA
377	2005	Apr	Knowledge Transfer tool guidance introduced (April 2005)	DOC	WORD	INTRA
378	2005	Apr	In an email to KA's, Mark asks them to forward their subsidiary priorities to Marlene 'so that we can support you on your local picture and know what to expect re: your participation on [one network] priorities'.	EMAIL	OUT	PEA

379	2005	May	Information strategy to be drafted by Mark (May 2005)	DOC	WORD	PEA
380	2005	May	Marlene clarified the role of KAs in CoP development: organising and facilitating 2-day workshops	DOC	WORD	PEA
381	2005	May	In a 1:1 meeting with Louise the Marlene mentioned that her role had changed to KA liaison (May 2005)	FIELD	WORD	OBS
382	2005	May	In a 1:1 meeting with Louise the Marlene mentioned that the CoP surveys had flagged up that CoP 2-day workshop too general and one-size fits all approach doesn't work (May 2005)	FIELD	WORD	OBS
383	2005	May	Louise noticed Isla and Marlene have been removed from Network KAs email group (May 2005)	FIELD	WORD	OBS
384	2005	Jun	BT KPMG evaluation complete (June 2005)	WEB	HTML	INTER
385	2005	Jun	KM Guru Etienne Wenger presentation (June 2005)	DOC	PPT	INTRA
386	2005	Jun	KA CoP workshop review outputs re: relevance of all tools; staff time restraints (staff driven by targets and they take priority); seen as nice to do/not a priority (June 2005)	DOC	WORD	INTRA
387	2005	Jun	KA CoP workshop review: many of the tools more aligned to community development - some have limited scope at local level (June 2005)	DOC	WORD	INTRA
388	2005	Jun	KA CoP workshop review: focus on local business priorities; constantly having to push services; its hard work constantly having to look for opportunities (June 2005)	DOC	WORD	INTRA

389	2005	Jun	KA CoP workshop review: more coaching/shadowing required; lack of knowledge of different types of facilitation tools	DOC	WORD	INTRA
390	2005	Jun	Discussion group posts between Louise, Gail, Niel and Ross re: facilitation role (March 2005)	EMAIL	OUT	PEA
391	2005	Jun	In a telephone conversation with Louise, Gail mentions she had an argument with Isla regarding the scope of the KA role. Gail says: 'according to the party line everything we do is Knowledge Working, including those jobs that people do who wear many hats'.	FIELD	OUT	PEA
392	2005	Jul	Public sector information (PSI) introduced (July 2005)	WEB	HTML	INTRA
393	2005	Aug	KA meetings to take place every quarter from August 2005	DOC	WORD	INTRA
394	2005	Aug	Kirklea's KA line manager is not interested in Marlene/Isla 'playing us off against each other'	FIELD	WORD	OBS
395	2005	Aug	HQ email: PuSA restructure news expected August 2005	EMAIL	OUT	PEA
396	2005	Aug	Mark requests subsidiaries agree KW subsidiary priorities (August 2005)	EMAIL	OUT	PEA
397	2005	Aug	Email from Ross to Louise shows meeting agenda item on applying action based learning to the project lifecycle (August 2005)	EMAIL	OUT	PEA
398	2005	Sep	KM Guru Dave Snowden presentation (September 2005)	DOC	WORD	INTRA
399	2005	Oct	Knowledge Cafe tool and guidance introduced (October 2005)	DOC	WORD	INTRA

400	2005	Oct	Records management consultation: KAs to provide feedback on policies (October 2005)	EMAIL	OUT	PEA
401	2005	Oct	Intervention frameworks: KA information gathering exercise (October 2005)	DOC	WORD	PEA
402	2005	Oct	Intranet benchmarking results meeting: recommendation to set up an Intranet Governance Group (October 2005)	DOC	WORD	PEA
403	2005	Nov	HQ email to PuSA staff re: press speculation about restructure (November 2005)	EMAIL	OUT	PEA
404	2005	Dec	Subsidiary KW priorities amalgamated into one spreadsheet (December 2005)	DOC	WORD	PEA
405	2005	Dec	HQ email to PuSA staff: metropolitan regions consultations with subsidiary boards, politicians, and partners (December 2005)	EMAIL	HTML	PEA
406	2005	Dec	Intranet KW subsidiary surveys encouraged (December 2005)	EMAIL	HTML	PEA
407	2005	Dec	CEO 3 initiates a Business Improvement Directorate to help coordinate Business Improvement Programme 3 change initiatives	EMAIL	OUT	PEA
408	2005	Dec	Bonni gives Louise a document outlining how this Business Improvement directorate was meant to operate	FIELD	WORD	OBS
409	2006	Feb	KA meeting: 8 KAs map their experience of using KW tools (February 2006)	FIELD	WORD	OBS

410	2006	Feb	Sarah email to Louise shows draft guidance on key relationship mapping, a simpler process than Verna Allee's value networks (February 2006)	EMAIL	HTML	PEA
411	2006	Feb	KW materials (tools) review first phase complete (February 2006)	EMAIL	HTML	PEA
412	2006	Feb	CoP assessment tool and guidance introduced (February 2006)	DOC	WORD	INTRA
413	2006	Feb	Best practice guidance introduced (February 2006)	DOC	WORD	INTRA
414	2006	Feb	Web trends: KAs provided with logins (February 2006)	EMAIL	HTML	PEA
415	2006	Feb	Intranet document sharing introduced (February 2006)	DOC	WORD	INTRA
416	2006	Feb	HQ email to PuSA staff: financial crisis and restructuring ongoing (February 2006)	EMAIL	OUT	PEA
417	2006	Feb	Mark restructures KW Team into two teams: organisational learning and information management (February 2006)	EMAIL	OUT	PEA
418	2006	Mar	Emails between KAs re: new today item that had not been discussed with them: Project Development	EMAIL	OUT	PEA
419	2006	Mar	In an email to all KAs Louise mentions that KAs appear on the intranet as facilitating case study development. This prompts a discussion on the KA role. In return email Shona says 'I would have thought it would be good practice to discuss with and make us all aware of the content of any communications that concern us before they are communicated!!!!' (March 2006)	EMAIL	OUT	PEA

420	2006	Mar	Scottish Executive announcement that Careers Services is to move out of PuSA (March 2006)	WEB	HTML	INTER
421	2006	Mar	PuSA 'cash crisis' in press (March 2006)	WEB	HTML	INTER
422	2006	Mar	HQ email to PuSA staff: Deputy First Minister has asked PuSA to retain 12 subsidiaries and local decision-making (March 2006)	EMAIL	OUT	PEA
423	2006	Mar	Mark email to all KAs says: 'there is going to be a review of 'business support services' as set out in Friday's briefing. Any consideration of the KA role, along with the rest of support services, will take place within [this] context.	EMAIL	OUT	PEA
424	2006	May	Subsidiary CEO email to staff: PuSA internal restructuring review still underway so no final deadline date (May 2006)	EMAIL	OUT	PEA
425	2006	May	HQ email to PuSA staff: PuSA budget and operating plan complete (May 2006)	EMAIL	OUT	PEA
426	2006	May	CoP review reports complete (May 2006)	DOC	WORD	PEA
427	2006	May	At a KA quarterly KA meeting in May 2006 Marlene reveals that Mark changed the KW team structure: there are now 2 teams: organisational learning and information management	DOC	WORD	INTRA
428	2006	Jun	PuSA network brief: announced changes 'to realign a range of support services across [PuSA]' HR to lead discussions with business units re: organisational structure change; mentions new HQ information services	DOC	PPT	INTER

			team (June 2006)			
429	2006	Jun	KW CoP annual community review draft report (June 2006)	DOC	WORD	PEA
430	2006	Jul	In email to Louise from Gail re: organisational change she says: 'Reckon we're going to get caught in middle, i.e. AQ claiming that we're all KAs (focusing on variety of different areas) and LECs saying that the role was farce and none of us as are working as KAs etc.' Gail also mentions that she has been 'redeployed' and 'no longer on KA/KW stuff' but to 'appear to HQ to be Newton's KA' (Aug 2006)	EMAIL	OUT	PEA
431	2006	Aug	HQ email: new Corporate Services Directorate: ICT, KM, Business Improvement, Internal Comm's, Org. Learning and Corp. Office (August 2006)	EMAIL	OUT	PEA
432	2006	Aug	KW Team 'end of era' diary appointment re: KW Team being disbanded (August 2006)	EMAIL	OUT	PEA
433	2006	Aug	Email from Arthur to Louise and Gail re: KAs proposed structure metropolitan regions (organisational change update for CEO's presentation) (August 2006)	EMAIL	OUT	PEA
434	2006	Sep	Scottish Executive announce that Careers Services to become stand-alone public body (September 2006)	WEB	HTML	INTER

435	2006	Sep	Web trends guidance introduced (September 2003)	DOC	WORD	INTRA
436	2006	Oct	In emails between Louise, Arthur and Gail re: organisational change programme update presentation that mentions KA metro-role. Gail's response is '....just think, we could be racing around the region in our Network cars leading business-critical, metro-level yellow stickie label sessions - how marvellous. Come to think of it, was that not Plan A??....& just look at what a roaring success that was..... (October 2005)	EMAIL	OUT	PEA
437	2006	Oct	An email from Louise's line manager to Corporate Services Director re: KM Team roles template says: 'the key issues I think we need to highlight include: getting clarity on any proposals to consider roles outwith the scope of this current exercise i.e. Knowledge Analyst and product manager' (October 2006)	EMAIL	OUT	PEA
438	2006	Nov	KA emails from Jane, Gail, Lorna and Sarah to Louise re: undecided KA structure and roles (November and December 2006)	EMAIL	OUT	PEA
439	2006	Dec	KW CoP sponsor retires (December 2006)	WEB	HTML	INTRA
440	2006	Dec	Mark email to KW CoP re: disbanding KW CoP (December 2006)	EMAIL	OUT	PEA
441	2007	Jan	No PuSA update on KA structure (January 2007)	FIELD	WORD	OBS