

**The Perceptions of e-HR Outcomes by HR and Line
Managers: A Study in Three UK Based Subsidiaries of
Global Organizations**

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ABSTRACT

Conducted within the UK-based subsidiaries of three global organizations, this research examines the perceived outcomes experienced by HR managers and line managers associated with the proposed implementation, and actual use, of e-HR.

The research settings are the UK operations of Cable & Wireless Global, Schlumberger and T-Mobile. Both qualitative and quantitative data are used in a multiple case study approach, which leads to the development of a theoretical framework that attempts to illustrate the relationship linking HR strategy with e-HR outcomes. These data provide partial support for the model's validity but also show the need for a more dynamic understanding of the links between e-HR variables and the importance of context in explaining differences between line managers' acceptance of e-HR.

This research attempts to bridge academia and practice; to provide new academic insights into the world of e-HR and to translate this in ways that allow a useful contribution to practice.

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In the world of practice, I have received enormous support from many people, but special appreciation is reserved for Professor Graeme Martin, Linda Holbeche, Mark Withers and Mark Williamson, all of whom have influenced the shape of my professional undertakings over many years.

Without the support of my family, none of this would have been possible. I hope their patience will be rewarded as I return after many years of absence.

DECLARATION

The author brings to the attention of the reader that the information contained in this research is both commercially and personally sensitive. The copyright resides solely with the author. No part of the research data or derived information may be used or quoted without the author's prior consent.

Chapter One

Introduction

1.1 Background to the Research

The aim of this thesis is to examine the perceived impacts created by the e-enablement of Human Resources (e-HR) on HR and line managers. In simple terms, this refers to the use of web-based technologies to provide information access and certain transactional functionality directly to line managers and employees. This so called 'self-service' is intended to streamline many day-to-day HR management processes and services.

The claims made for e-HR are highly influenced by software vendors and consultants in the field. They point to the reduction in transaction costs, the improvement of transaction services to increasingly demanding line managers, and freeing up HR professionals to perform higher value activities, as core reasons for investing in e-HR. But does the rhetoric that drives the e-HR solution generate commensurate outcomes? And what knowledge can be generated that might help academics and practitioners to understand better the factors that influence these outcomes?

My research work started in July 2001 at Cable & Wireless and concluded in 2007, following further case study research at Schlumberger and T-Mobile. Some of the ideas, quotations and subsequent findings from my investigations influenced three academic conference papers (Martin, Alexander, Reddington and Pate, 2006; Reddington and Martin, 2006; Reddington, Martin and Bondarouk, 2008) and two books aimed at the HR practitioner audience (Reddington, Williamson and Withers, 2005; Martin, Reddington and Alexander, 2008). As such, elements of these papers and books have been entwined into the fabric of this thesis, and expanded to provide a greater degree and depth of analysis and interpretation that was not possible in the original material. One of the papers - Reddington and Martin (2006) – can be found in Appendix 1 and illustrates the emerging development of a theoretical framework which underpins the knowledge contribution of this thesis.

The primary motivating force behind the research was initially derived from my job role as e-HR Transformation Programme Director at Cable & Wireless Global (CWG). This organization was formed in the autumn of 1999 when a new structure was announced for a number of the Cable & Wireless Group's businesses. The aim was to create a global

organisation to focus strongly on data and Internet Protocol (IP) based services for business customers. Activities were organised around key geographic areas – UK, USA, Japan and Continental Europe, allied with a Global Markets operation responsible for managing the top 85 customer accounts on a global basis. In total, this new entity employed some 25,000 staff at the outset, of which about 700 were in the Human Resources (HR) function.

The ensuing e-HR Transformation Programme ran for approximately three years. My role was to improve the efficiency of internal HR processes and to create a culture of self-service provision where employees and managers alike could use new web-enabled technology to access a range of services that would have been supplied previously by the HR function. This internal position gave me an opportunity to conduct research involving UK based HR and line managers to elicit their perception of the impending arrival of e-HR.

However, I left Cable & Wireless through voluntary redundancy at the end of October 2002 and this, combined with other factors, restricted my research to a single phase of data capture and analysis. I was able to continue my research into the impacts of e-HR in two other organisations – Schlumberger and T-Mobile. This work was undertaken in the UK in my capacity as an independent external researcher. In both cases, the organizations' e-HR tools were already embedded and this provided an opportunity to compare findings between them and also in respect of the earlier research which looked at the emerging development of e-HR at CWG.

1.2 Research Question

This research seeks to understand how HR managers and line managers perceive e-HR outcomes in the UK subsidiaries of three global organizations. It does not focus on a specific problem but seeks to identify the range of outcomes that result when e-HR is introduced.

The central research question is:

How do HR managers and line managers perceive the outcomes of e-HR?

The emerging literature in the field identifies a discernible void with regard to this line of research, as exemplified by Kettley & Reilly (2003 p 1) which asserts that: *"The literature is currently dominated by the views of the major software vendors and solutions providers. There is a noticeable absence of empirical research on e-HR, reflecting the evolution of the practice and problematic nature of access to employers...."*

My research attempts to liberate findings that have resonance from both academic and practitioner perspectives. In doing so, the central research question is unpacked to inform an examination of related questions:

- 1. To what extent are the data and information provided by e-HR systems seen to be of value to line managers?**
- 2. Do line managers perceive the e-HR systems to be easy to use?**
- 3. Do line managers receive good HR support to help them get the best from the tools?**
- 4. Does e-HR support an unfolding importance or appreciation of People Management?**

These questions inform the overall research approach and the structure of this thesis, which is now explained in more detail.

1.3 Thesis Structure

Following this introduction, a comprehensive literature review (Chapter Two) examines the emerging phenomenon of e-HR relevant to my research domain. This review informs an organizing framework for the case research.

Chapter Three describes my journey through the 'methodological maze' and outlines the reasons for the methodology used in the research. The research design is based on an original research proposal submitted to Bournemouth University and has been modified as the research progressed. At the outset, it was envisaged that all of the research would be undertaken within Cable & Wireless, utilising an Action Research framework. As events unfolded, however, it became necessary for the research to accommodate a more traditional, multi-case study approach, involving several organisations and a shift in my personal positioning within the context of the research, from being an internal practitioner to an external consultant.

Chapters Four, Five and Six describe the individual case studies.

① Chapter Four provides a detailed account of the first case at Cable & Wireless, conducted in 2001. This research captured the perceptions of HR managers and line managers towards e-HR before it had been substantively implemented. Twelve participants took part in the research, which was based upon a 'Stakeholder Dialogue' process conducted by an external consultant, to minimise researcher bias. The findings were subsequently re-examined using Repertory Grid Technique (RGT) using a software programme called Enquire Within™.

② Chapter Five describes the research at Schlumberger conducted during 2003/2004. This bore a number of important differences from the first phase of research at Cable & Wireless: Firstly, my own status as researcher had changed from 'someone on the inside' to an independent, external consultant; secondly, I was fully involved in all aspects of data collection and analysis; thirdly, I was able to research a larger participant population compared with Cable & Wireless and adopt an approach combining a web-based survey with one-to-one interviews.

③ The third and final piece of research, covered in detail in Chapter Six, took place at T-Mobile in 2006/2007. Building on the work at Schlumberger, it involved a larger population of managers than previous research cases and deployment of a web-based survey followed up with focus group discussions.

Chapter Seven provides a *cross-case comparison* and develops an illustrative theoretical framework linking HR strategy with e-HR outcomes. This framework and the resulting classification of e-HR outcomes, constitutes the primary contribution to knowledge of this research.

Chapter Eight presents overarching conclusions and suggests future research directions. In doing so, it examines the contribution that my unfolding research has made to theory and practice. During the entire period of the research I have consciously attempted to share the evolving findings through professional and academic publications, conferences and master classes.

Additional, relevant information is presented in the appendices to substantiate or expand on material presented in the main chapters. Having painted a picture of the contextual background to the multiple case research exercise and the overall shape of the thesis, the next chapter reviews the relevant literature in the field of e-HR.

Chapter Two

Literature Review

2.1 Introduction

There is a growing body of literature drawing attention to the very important role of Information and communication technology (ICT) in the future of the HR function, suggesting that it offers the ability, via e-HR, to transform its operations and value contribution to the business.

To encourage a more focused and critical debate, my research examines the factors that influence and shape the perceptions of e-HR through the lens of HR and line managers. This literature review does not claim to be the definitive guide to all things e-HR, but rather seeks to present some of the most significant concepts and debates to have emerged in recent years.

e-HR is a recent phenomenon (Guetal & Stone, 2005), emerging within the more established and broader context of technology, organisation and people management. The e-HR literature is primarily concerned with software vendors that manufacture e-HR functionality or consultancy houses that clearly have a vested interest in persuading existing and prospective client organisations to buy their services.

Recent examples include the first European survey of 173 companies conducted by Watson Wyatt (2002). It concluded that Europe lags behind the US in recognising the value of e-HR but is moving swiftly towards the change, pointing out that 75% of participating companies plan to make changes in e-HR within the next 2 years. The UK companies' 'hard' business benefits such as reducing costs and increasing HR productivity feature highly.

The European e-HR survey (O'Farrell and Furnham, 2002) of 150 companies broadly supported these findings but also drew attention to environmental and behavioural factors as being the principal obstacles in preventing organisations from implementing and using available HR technologies.

What we see, therefore, is an emerging recognition of the importance of human transformation in the deployment e-HR, but remarkably little evidence that attempts to define

those impacts, as perceived by the affected parties – particularly line managers. This is significant given that:

“Line managers are primarily responsible for the HR practices within a firm. Line managers have ultimate responsibility for both the outcomes and the processes within a firm.” Ulrich (1997, p 236)

From my own experience in this field, referenced in Chapter One, I was able to observe that significant internal impacts on the HR function and the line management can be expected when e-HR is introduced. Part of the espoused case for e-HR (Ulrich and Brockbank, 2005) is that it offers the potential to transform HR’s role. It promises to do this by:

- I. Increasing the HR function’s influence as consultants focused on the needs of managers and employees
- II. Enabling new flexible and responsive methods of delivering HR services, such as self-service via the Internet or Intranet
- III. Expanding HR’s reach as the experts of the organisation’s people processes and the developers of value propositions for different employee groups.

As such, it can be seen to represent a major paradigm shift in HR management, as it moves from a more traditional administrative support role into ‘business partnership’ (see section 2.7.1). Whether this will be achieved or not depends upon the extent to which e-HR is seen simply as a technological mechanism to achieve operational and informational improvements. It is all very well arguing that the technology will release the time and energy of the HR function, enabling it to be more innovative, more aware and responsive to the needs of the employees and managers that make up an organisation – referred to as ‘customers’ in this review. However, this may only be a necessary but not sufficient condition for a transformation. There needs to be a will to change and a capability to do so within the HR function. Moreover, customers need to shift their perception of the value that HR can add. All too often, it seems the perceived pre-occupation with administrative activities *“leads to an institutionalised devaluation of the HR function by the rest of the organisation because of HR’s low level of contribution to the business.”* (Lawler and Mohrman, 2003; p 110)

The examination of these factors forms the basis of my research question, which attempts to address a discernible void:

How do HR managers and line managers perceive the outcomes of e-HR?

The importance of this question cannot be over emphasised. Investment in e-HR can run into £millions and unless the outcomes of e-HR are understood in terms of the way in which they can change, possibly beyond all recognition, the ways of working between HR and the line, then the potential benefits can be seriously undermined.

2.2 Technology and People – Informing the Debate on e-HR

To help inform and shape the e-HR debate, earlier literature is reviewed that examines technology and people, to see what can be learned.

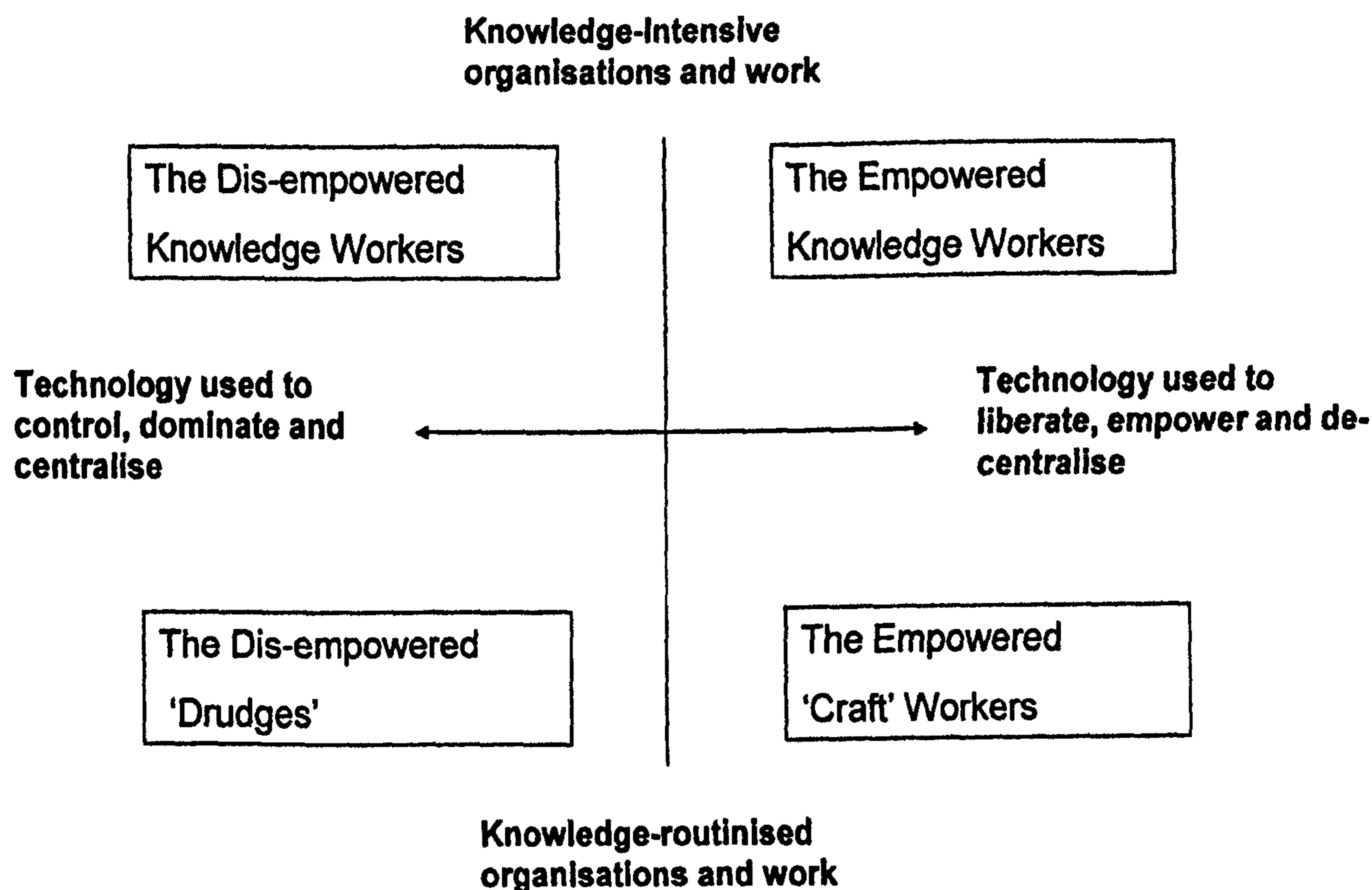
Typically the arguments that apply to the more critical literature concerning technology, knowledge and skills, whether from a labour process or socio-technical perspective, tend to focus on the dialectics of technological change or a perspective that highlights the co-existence of domination and liberation. These themes are set out diagrammatically in Figure 1, based on the work of Martin (2005). In broad terms, the appearance or promise of liberation, empowerment and decentralisation is shown with its contrast of control, domination and centralisation. This leads to a key question (Martin 2005, p 2)

“To what extent is there a choice between using technologies as a dominating and centralising force, perhaps leading to a deskilling of employees, or as a potentially liberating and empowering force, enhancing the role of employees and HR managers and in re-skilling work?”

Different forms of technology and technological change have been at the heart of many of the issues concerning the management of people and the work of human resource professionals for many years. In more recent times, however, these issues emanate from the role of newer technologies in transforming societies, transforming economic progress and in how we work in such societies. Excellent overviews on different aspects of the role of information and communication technologies (ICT), the 'new' economy and work can be found in the work of Castells (1996), Coyle & Quah (2004), Slevin, (2000) and Taylor (2004).

This has resulted in a renewed interest in the relationship between these new technologies and the management of people (see, for example, Malone, 2004; Nathan et al, 2003).

Figure 1: The Contrasting Impacts of Technology

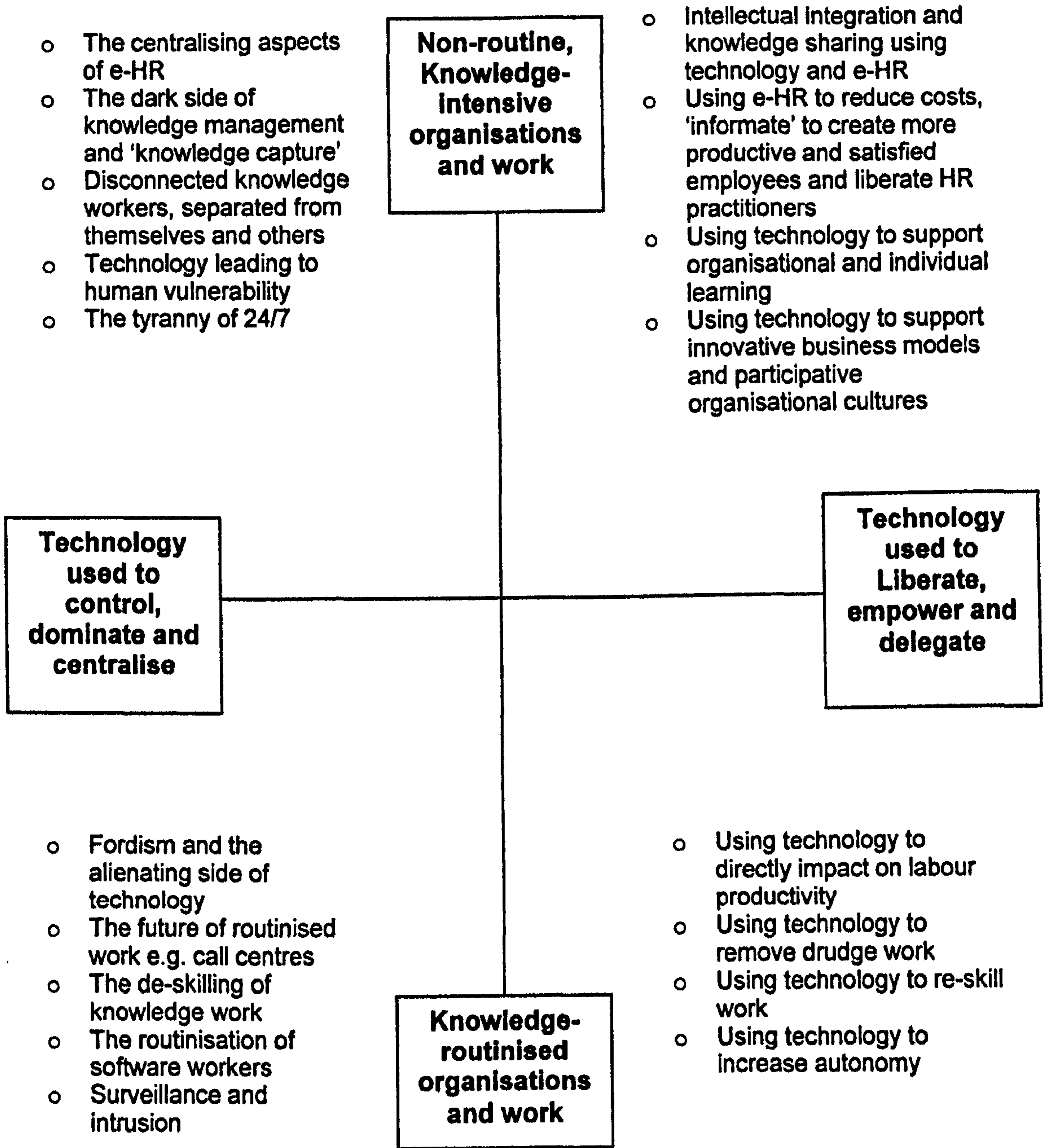


Source: Martin (2005)

These more macro and intellectual concerns have been accompanied by the actual influence of technologies on the practice of human resource management. For example, Sparrow, Brewster & Harris (2004) have singled out technology as a transforming force, especially in the e-enablement of HR (e-HR) and its impact on the creation and transfer of knowledge.

An analysis of the two streams of literature – one looking at the more macro, new economics of knowledge and technology and the rise of knowledge-based enterprises, and the other at the more micro, often sociologically-informed, research into technology, knowledge work and knowledge workers - allows the development of an organising framework for this literature - see Figure 2.

Figure 2: Organising Framework for Literature on Technology, Organisations and People (based on Martin, 2005)



The framework presents four scenarios, images, or lenses, (Morgan, 1997) through which to view the relationship between newer technologies, organisations and people management. Each of these images may reflect a dominant view of organisation within a company, or characterise certain departments or divisions within a company.

The critical point is that although one perspective may be a way of seeing, it is also a way of not seeing and appreciating this helps to explain many of the paradoxes and dualisms associated with technical change and people management.

The framework is helpful in providing a context for e-HR in bringing out the dialectics of technological change in knowledge-based enterprise and also underpins the relevance of research that seeks to examine these claims.

2.2.1 The Dialectics of Technological Change in Knowledge-Based Enterprise

Signs have been mounting for some time that previously accepted concepts of organisation and strategy have come to an end. The fundamentally Newtonian paradigm of organisations as machines and strategy by numbers has given way to structural change that shifts the emphasis from physical inputs and outputs to intangible ones such as knowledge, learning, creativity and initiative. The old paradigm of top-down control and hierarchical organisation appears to have exhausted its capacity to generate innovative responses to turbulent business conditions and intensifying global competition – indeed, far from fostering innovation, many managers feel it is holding them back. (CIPD, 2002)

Thus, this new economics, based on the knowledge-based economy and on new knowledge-based enterprises has two important implications for the relationship between technology and human resource management. The first of these focus on knowledge and skills as the key factor in economic growth and *technology* as both the key *input* and key *output* of knowledge creation (see the World Economic Forum, 2004).

The second, perhaps more important from the perspective of human resource management practitioners, is that the new economics of knowledge and technology, both of which are essentially human constructions, depend to a large extent on the management of intangible assets, most notably the quality and management of people, their tacit knowledge and how they are organised. This has been explicitly acknowledged in a number of key reports, such as the influential OECD (2001) report on the 'New Economy'. It is also argued that managers now add more value to the business process through their brokering of

information, their access to a distinct set of suppliers of information who gather, select, edit, codify and publish knowledge; and via their active participation in this “information market” (Hansen and Haas, 2001).

This sets the context for recent reports that delve more specifically into the role and impact of technologies at the more micro, organisational and people management level (Cairncross, 2003). Drawing on these sources and other contemporary insights – Felstead, Gallie & Green (2002), Turkle and Coutu (2003) and Malone (2004) - it is possible to examine in more detail some of the dialectic characteristics of the new paradigm – see Table 1.

The preliminary analysis of the literature – old and new – helps to inform the debate about the impact of and relationship between new technologies and people management. It suggests that these technologies are a moving target, which is likely to pose new problems and new contexts for organisations, especially as they move into newer stages of technological development.

With the new knowledge-based technologies advancing at a rapid pace, people management becomes an important mechanism for challenging the “forces of conservatism”, whether found in management or the workforce, and hence enabling organisations to more rapidly translate investments into better performance. This implies that in a knowledge-based economy, organisations certainly need to invest more in research and development, technology and capital equipment and skills, but these are not sufficient in themselves to make a step change in performance. Therefore to work, they need to be knit together in a truly people-centred business model, working as a system to learn and improve the offering to customers (CIPD, 2001).

It is worth noting at this point the liberal use of the word ‘customers’ to define the recipients of the organisation’s services. When applied to HR practices within this literature review, the term ‘customers’ relates to the employees of an organisation (internal customers) and any third party dependencies that may interface with HR (external customers) and expect to receive a service.

Table 1: The Dialectics of Technology (adapted from Martin, 2005)

Possible benefits	Possible downsides
<p>Technology is driving down the costs of information flows and speeding up the transmission of information, which, in an increasingly knowledge-based economy, is a critical success factor.</p>	<p><i>Will this encourage dialogue and intelligent relationships between organisations, groups and individuals, or existing patterns of control and domination?</i></p>
<p>Technology has led to new applications and business models, including new ways of organising work such as e- democracy, e-business and e-commerce.</p>	<p><i>How might these new technologies allow organisations, groups and individuals make things happen, rather than have things happen to them, in the context of organisational and societal goals?</i></p>
<p>Technology has the potential to make all kinds of work more productive because it increases access to information and makes markets more efficient.</p>	<p><i>Will this create new ways of limiting the damage caused by economic pressures on organisations, groups and individuals (i.e. deskilling and work intensification), or lead to even greater damage (e.g. stress and intrusion problems, health and safety problems, increased human vulnerability and the '24/7/always on' problems)?</i></p>
<p>Technology speeds up the adoption of new techniques and innovation by connecting people and organisations, often across time zones and distance.</p>	<p><i>Will this bring together organisations, groups and individuals that up until now have been separated by time, space and culture? Or lead to new forms of social disintegration by alienating people who once worked together?</i></p>

It is recognised that as soon as the concept of customer is mapped onto employees it suggests the release of a whole armoury of marketing concepts and techniques that come into play. Employees are 'marketed to' and 'segmented' so that policies and practices can be tailored and 'sold' to each segment and employee communications can be regarded as an internal marketing exercise (Hales, 1994; Barrow & Mosley, 2005; Huselid et al, 2005)

An appreciation of these concepts and techniques helps to explain why e-HR offerings can vary from one customer segment to another; HR managers and line managers being good examples. Section 3.2 briefly looks at this and also the concept of Business to Employee (B2E) offerings.

Encircling all of this, it seems, is an accent on the adoption of technologies to streamline processes and facilitate knowledge transfer between and within groups of workers in the organisation. Drawing together these themes, it is evident that the notion of top-down control is now giving way to a more devolved approach, with managers afforded more trust and opportunity to embrace and enact human resources practices in pursuit of business performance.

This move suggests a shift in the relationship between the HR function and line managers, with managers assuming more day-to-day responsibilities, whilst their HR counterparts assume more strategic roles in the business. Implicit within this relational shift is the deployment of technology to allow managers more direct access to information and HR processes.

This provides the backdrop for a more detailed examination of e-HR. Just what is it and what claims are being made about its impact on organisations?

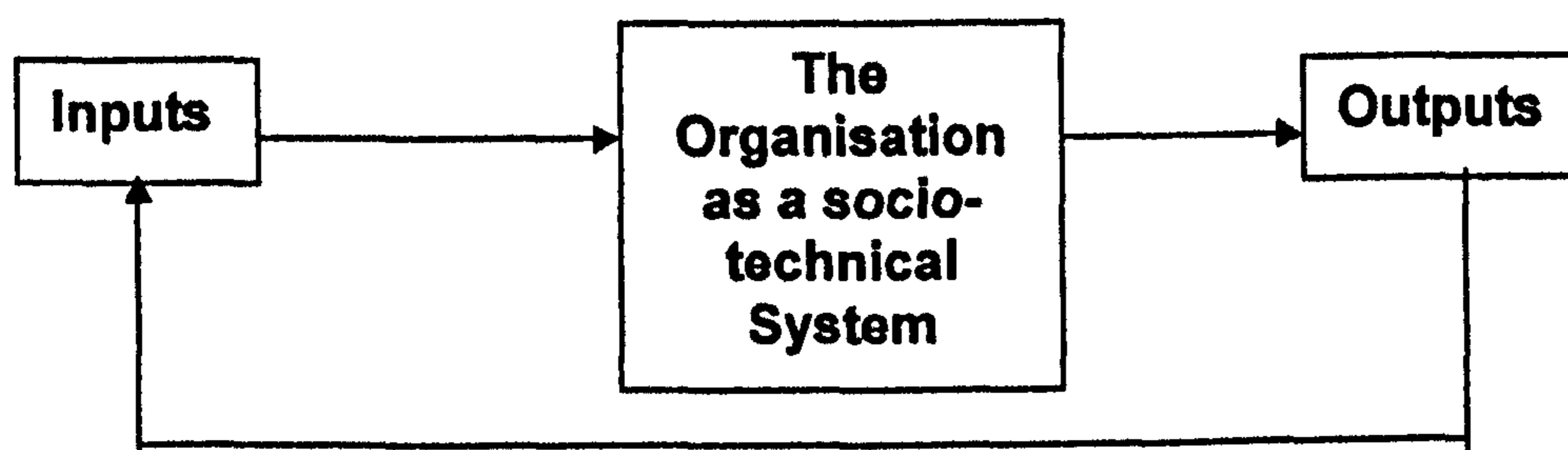
2.3 What is e-HR?

Before a more detailed examination of e-HR is undertaken, it is necessary to be more specific about what is meant by technology, since various writers and traditions in the extant research have different conceptions of where technology begins and ends, especially in relation to the hardware of material objects and the software of organisations.

In the field of business and management studies, technology is traditionally seen as the means by which a desirable outcome or goal is achieved, such as the development of a new product or service, or the development of a new process such as the e-enablement of HR (Hatch, 1997). From this perspective technology is based on an open systems model,

which sees the organisation as a technological process converting inputs from the environment into outputs, and allows us to relate organisational technologies to resource requirements and to the objects of technology, such as automobiles, the e-enablement of HR or elaborated knowledge structures in the heads of employees – see Figure 3.

Figure 3: A Basic Open-systems Model of Organisations



Adapted from Hatch (1997)

More recent concepts of technology architecture come from the ideas of Galliers and Newell (2003). They used the term to describe how flexible socio-ICT systems can dynamically respond to changing information requirements during ICT implementation projects. Their model introduces the concept of an information architecture in an attempt to connote an enabling socio-technical environment for both the exploitation of knowledge (efficiency) and the exploration of knowledge (innovation).

As Galliers and Newell (2003, p 192) put it:

“The concept of an information infrastructure has developed in response to the need for greater flexibility, given changing information requirements. In the 1980s and into the 1990s, the term information infrastructure usually connoted the standardization of corporate IT systems and data with a view to reconciling centralized processing with distributed applications. Increasingly however, the concept has come to mean not just data and systems, but the human infrastructure, (roles, skills, capabilities, viewpoints etc.) and this is where knowledge creation and sharing play an important role.”

Infrastructures are thus seen as being heterogeneous and socio-technical in nature.

Thus, an e-HR architecture is a broader notion than e-HR technologies and this broader definition is used throughout this review because it steers away from a purely technician perspective that has restricted discussions in this important field of study to discussions of technology hardware and systems. It also helps explore the interfaces between the various components of a technical system and its relationship with the management of people.

2.3.1 HR Technology

e-HR is a technology-enabled phenomenon that depends on having adequate IT infrastructure in place. Consequently, every organisation enters the e-HR journey at a different point and it is helpful to take a closer look at some of the technological infrastructure available to the HR function considering e-HR:

Human Resource Information System (HRIS)

The HRIS system is the primary transaction processor, editor, record keeper, and functional application system that lies at the heart of all computerised HR work. It could be any one of the following:

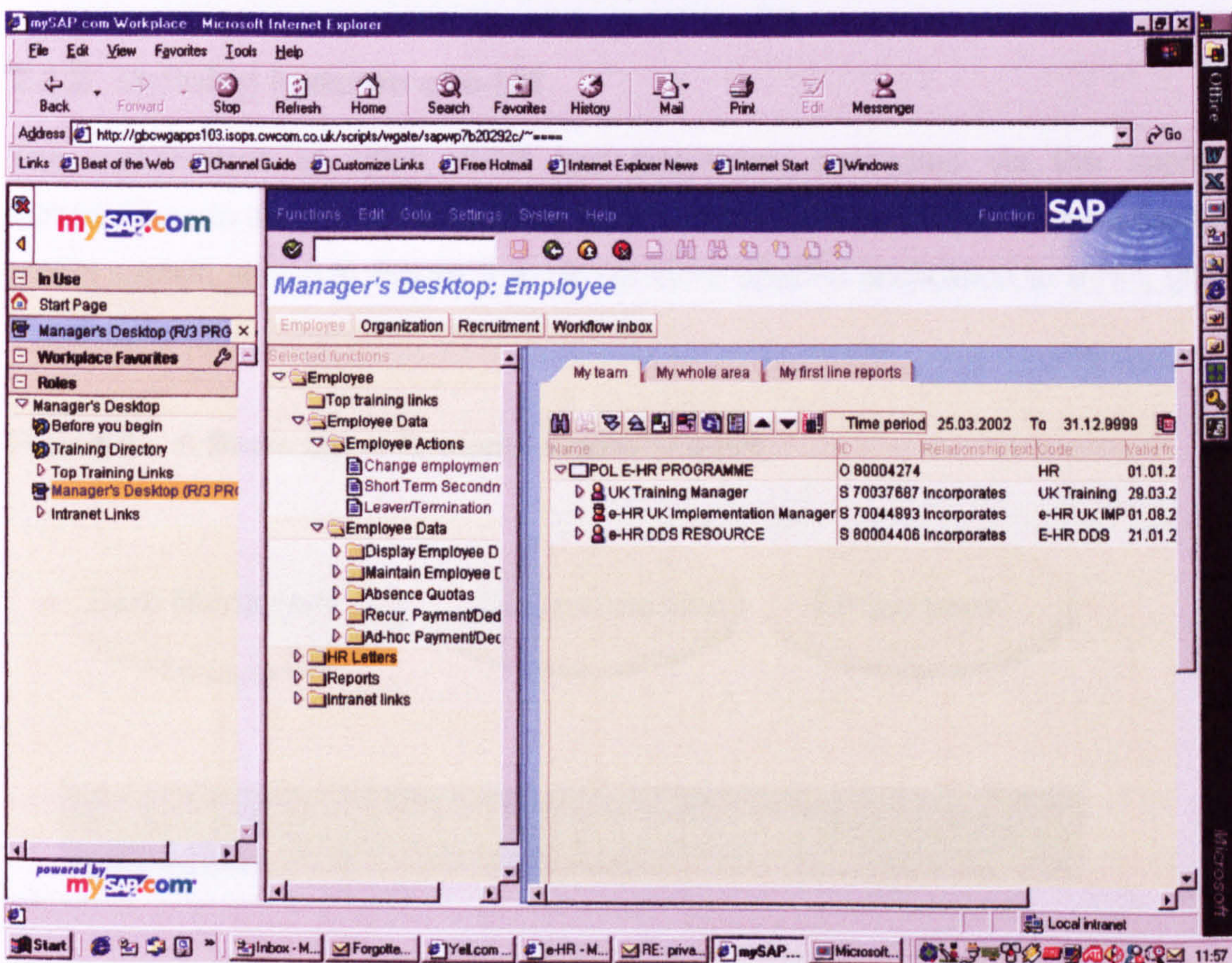
1. bespoke (internally developed or externally contracted)
2. stand alone, specialist package software
3. enterprise software, i.e. offered as part of an enterprise resource planning (ERP) solution
4. or a combination of any of the above

It is not unusual for large organisations to have deployed their HR information systems (HRIS) nearly a decade ago. These applications, though often ungainly and lacking integration, helped HR automate some of its processes, paving the way for web-based systems. In response to this developing demand for more flexible, on-line HR systems, there have been two major moves. On the one hand, major HR systems providers such as SAP, Oracle and J D Edwards have adapted their core personnel and payroll systems in order to provide the web-based functionality organisations are looking for. On the other, several specialist providers have emerged, with specific on-line applications. It is not essential for an HRIS to be web-enabled in order to run across a company's existing PC network. However, there is growing demand to be able to access HR systems remotely and at any time – possible via a web-based front end or user interface. (Kettley & Reilly, 2003; Martin, 2005; Parry, Tyson, Selbie & Leighton, 2007)

Enterprise Systems (ERP)

Some would argue that whilst intranets provide the 'plumbing' and web-browsers can provide the 'access', it is the business intelligence software, such as data mining and executive information, that provide the real engines in most new HR systems (Al-Mashari, Lesser & Demarco, 2005; Parry et al., 2007). Beyond the intranet, many HR organisations are looking to use the web to link their back-end systems, such as HRIS, that are normally accessible only to specialist administrators or 'super users' to those of their insurance, payroll and retirement service providers, in the same way as buyers and suppliers of goods and materials link their applications to speed up manufacturing. All of the leading ERP software vendors now offer web-enabled HR software as part of their standard offering. An example of this is shown in Figure 4. It is a screen shot of a manager self-service application commissioned at Cable & Wireless and allows managers to access information directly about their team.

Figure 4: Manager Desktop Screenshot



Enterprise systems enable management of resources across distribution channels, business sites and supply chains. These systems are now spreading more widely into supply chain

management and customer relationship management systems. *Enterprise modelling* is a natural extension of this process thinking, combined with knowledge management interests. It is defined as the process of building models of the whole or part of an enterprise from knowledge about the enterprise (Vernadat, 1996). These techniques represent knowledge about the organisation and its business processes and provide business analysts with tools to move from high-level enterprise objectives through to detailed specifications of business processes and dependencies used to realise these objectives.

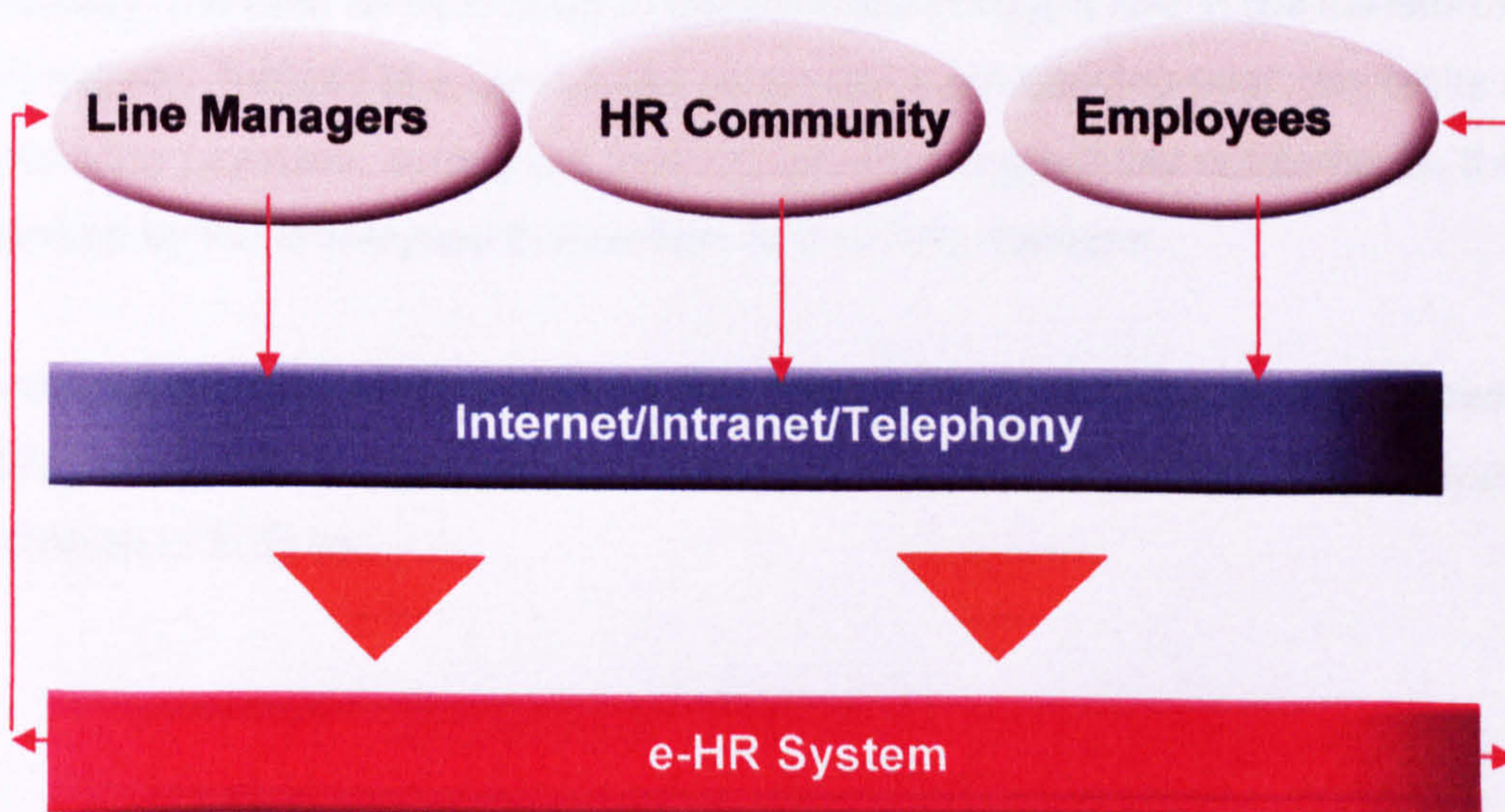
Telephony

While the primary enablers for e-HR are the internet technologies, telephony is a key component of HR service delivery, in call and service centres. Interactive voice response (IVR) is a relatively low-technology method, using the push button control facility found in most modern telephones. The system is restricted but easy to use and is relatively inexpensive in comparison to web-based methods. It is suitable for applications such as job vacancies and training course details, where straightforward information can be recorded as simple scripts (Young, 1999; Thaler-Carter, 1999; Florkowski & Olivas-Lujan, 2006).

2.3.2 Defining features of e-HR

The components of HRIS, ERP and telephony, connected via the appropriate IT infrastructure to the user communities, represent the e-HR system. Adapting the basic open model system shown in Figure 3 to reflect more specific application to e-HR, gives rise to Figure 5.

Figure 5: A Basic Open-Systems Model of e-HR



The topic of e-HR has attracted a variety of meanings. The more visionary, advanced interpretations describe a fully integrated, organisation-wide electronic network of HR related data, information, services, data bases, tools, applications and transactions that are generally accessible at any time by employees, managers and HR professionals. This model was described in the Introduction to this thesis, based on the Cable & Wireless experience, and is encapsulated by Hopkins and Markham (2003, p 7):

“Put simply, e-HR is the strategic application of web-based technologies to HR-related systems that along with other organisational changes will lead to a more broadly based access to HR information and wider opportunities for managing that information.”

A similar description but suggesting a more dramatic impact on an organisation is offered by Watson Wyatt (2000, p 1):

“eHR refers to the broad access to human resources data, tools and transactions available directly on the web in most workplaces today. It describes the “net effect” of the explosion in web technologies and the dramatic impact this growth has had on the way employees now receive employment-related information through integrated self-service applications. It also includes the variety of new technologies that help connect multiple systems, tools and databases, both inside and outside organisations.”

More basic interpretations, however, suggest that an organisation’s implementation of a new software package for payroll, or the simple posting of company policies on an intranet, signals its adoption of e-HR (Kettley & Reilly, 2003).

Typically, the term e-HR is used to describe technology’s role in the transformation of solely HR activity. Instead of a centralised personnel team handling everyday tasks such as approving pay rises, sorting out training and checking holiday entitlements, these can be handled by the employees themselves or their line manager.

Understanding, however, can be complicated by the use of the term Business to Employee (B2E) often interchangeably with e-HR. A 2002 survey of European employers adopts the definition of B2E as:

"The application of any technology enabling managers and employees to have direct access to HR and other work based services for communication, performance reporting, team management, knowledge management and learning... in addition to administrative applications." (Watson Wyatt, 2002)

Although both might encompass similar applications of technology, there is a distinction to be made between the use of the terms e-HR and B2E. E-HR is more confined to those activities that typically fall within the HR function, delivering employee self-service and a more responsive HR service. Those organisations explicitly using the term B2E to describe their adoption of technology within HR management are more likely to embrace a wider range of activities, including knowledge management and data mining, new office work styles, remote access and employee 'lifestyle' propositions such as electronic concierge services etc.

Despite a certain amount of confusion and a large amount of hype, it is clear that organisations do not all look at e-HR in quite the same way. Although enabled by it, e-HR can be defined by much more than the technology used.

For example, the IES Report 398 (2003, p 13) asserts:

"E-HR practices vary considerably in the extent to which they include the redesign of e-HR processes and service delivery methods. Consequently, the level of ambition has fundamental implications for the future configuration and design of HR roles, for the capability of HR staff and for the management of change."

This theme is also reinforced by Marquardt (2001), who argues that e-HR has emerged as a sustained trend and source of much innovation at both strategic and operational levels and that it will require new capabilities for HR professionals if they are to feel comfortable in using and applying technologies. It is not simply the delivery of a new technical system, but a radical overhaul of processes and capabilities.

This view begins to surface the potential difficulties associated with the transformation of the HR function, through the adoption of e-HR, as more activities are devolved to line managers and employees, in the expectation that it will liberate HR to perform more strategic, value-adding work. A view further endorsed by Mendoza (2002, p 2):

“Eventually, HR directors who have embarked on the e-HR route expect to be able to make a greater contribution to their company’s broad strategic aims. With a large part of the HR department automated, the theory is that HR directors can build a new team focused on the upstream issues. However, such a transition requires far more thought and planning than people think.”

It is apparent from the literature that interpretation and implementation of e-HR should be different according to the particular circumstances of different organisations. It suggests that a range of factors, which make up the strategic context in which HR operates, largely determines the organisation’s choice of an e-HR model. It is also possible to identify some of the tensions surrounding the dialectics of technology explained in section 2.

In order to explore possible e-HR models in more detail, it is helpful to begin by looking at the challenges increasingly faced by the HR function and how these translate into the drivers for adoption of e-HR.

2.4. What are the drivers for e-HR?

Building upon the technology and people literature reviewed in section 2.2, a number of contemporary academic articles and practitioner publications have drawn more attention to the ‘changing HR function’ (Lepak & Snell, 1998; Snell, Stueber & Lepak, 2002; CIPD, 2007; Tamkin, Reilly & Strebler, 2006; Ulrich & Brockbank, 2005; Boxall & Purcell, 2003; Martin & Hetrick, 2006; Paauwe, 2004;).

To build competitive organisations which increasingly rely on the intangible assets of knowledge, brands and reputations, the HR function is constantly challenged to meet a number of related, but sometimes competing, challenges:

- to make itself more cost effective by reducing transaction costs, headcount and/ or improving its efficiency of its services (*the operational driver*);
- to improve its transactional (e.g. payroll) and traditional services (e.g. advice on selection, legal matters, etc) to increasingly demanding line managers, employees, business partners and contractors (*the relational driver*);

- to address the strategic objectives of the business or organisation for (i) and/or (ii) achieving high levels of customer captivity and intimacy and/or (iii) achieving economies of scale (*the strategic or transformational drivers*);

These drivers can result in the re-organisation of the HR function itself, combining so-called *HR transformations* (new HR organisational models and process re-engineering) along the lines recommended by Ulrich & Brockbank (2005) and Beatty (2001) with *outsourcing* and, in some cases, *off-shoring* of key services (CIPD, 2005; Cooke, 2006; Reddington et al., 2005).

The second, like other business functions, is the turn to ICT, often introduced in combination with HR transformations and outsourcing to rationalise or radically change HR's internal operations (Kettley & Reilly, 2003; Shrivastava & Shaw, 2004; Bell, Lee & Yeung, 2006).

It should be noted at the outset that these organisational, process re-engineering and technological solutions are interdependent (Keebler, 2001): without progressively sophisticated ICT, HR transformations would not be possible, or at least not as effective, since it is the increased reach and richness of information and organisational learning brought about by internet and mobile technologies which have facilitated the simultaneous centralization and delegation of decision-making, a highly significant claimed distinctive capability of HR transformation models (Cairncross, 2003; Evans & Wurster, 1999; Ulrich & Brockbank, 2005).

And, according to some academics and leading practitioners, one of the logical consequences of these developments is the potential 'virtualization' and/or significant 'leaning' of HR (e.g. Keebler, 2001; Snell, et al, 2002). This results from simultaneously reducing the numbers of specialists required to deliver HR services while improving the quality of these same services and developing new HR business models typified in books linking innovative people management practices to innovative or 'Maverick' companies (Taylor & LaBarre, 2006).

The claims for new organisational solutions to HR and for the increased application of 'e' to HR appear to be progressively accepted as a novel, compelling and credible message in the marketplace for management knowledge. In line with the predictions of the institutional theory, which sheds light on the tendency of most firms towards mimicry of others' 'best practices' (Abrahamson, 1991; Lavie, 2006), organisations, including many in the public

sector, are falling over themselves to replicate the tripartite 'Ulrich' framework of shared service centres, centres of excellence and strategic HR (also see section 2.6).

At the same time, supply chain management solutions adapted from manufacturing industry have been applied to HR in the form of increased contracting out of non-core and low-value added HR services such as payroll and partnering with other providers to provide other non-core but higher value-added services such as legal advice, recruitment and training (Keebler, 2001; Brewster, Sparrow & Harris, 2004; Reilly and Williams, 2003).

As a result, the e-HR bandwagon is growing at a rapid rate, fuelled by some evidence-based management and good practice, but also by the persuasive powers of the growing number of consulting firms selling e-HR as part of a package of ERP solutions (Lengnick-Hall & Lengnick-Hall, 2006; Newell, Tansley and Huang, 2004; Walker, 2001). Both of the largest HR professional bodies in the world - the CIPD and the US-based Society of Human Resource Management (SHRM) - have made this issue one of their key areas for research and for educating members. HR and information systems academics have also begun to see the application of ICT to HR as a key area of interest and the subject of specialist conferences in Europe (e.g. First European Academic Conference on e-HRM, October 2006) and tracks in the Academy of Management.

Notwithstanding this groundswell of opinion among the HR community in support of e-HR, re-engineering the HR function and outsourcing, progress in the form of the more transformational benefits and pay-off in terms of cost reductions seems to have been more piecemeal and problematic, an area which is now examined in more detail.

2.5. An examination of the claimed benefits for e-HR

A significant body of literature – for examples see Ulrich (2001), IRS Employment Trends Review (2001), IDS Study (2001), Towers Perrin (2002), Watson Wyatt (2002), Lawler & Mohrman (2003), Martin (2005), Sparrow et al (2004), IES (2003), Parry et al (2007) – reports that companies continue to web-enable their delivery of human resource services at a rapid rate. The main reasons supporting this move are given below:

- The increasing costs of administering human resources during the 1990s, with more and more time required by human resource staff to enforce policy and undertake essentially routine, but important, administrative tasks.

- The increasing expectations and low levels of reported satisfaction of employees with HR services. As employees had widespread access to web-enabled services in areas such as personal banking, shopping and other information, expectations increased of what they were receiving at work regarding personal information. Thus, the rapid rise and interest in the e-enablement of HR has developed as a means of reducing costs, such as through the reduction in HR staffing levels, and meeting employee expectations.
- It is seen as a way of freeing up scarce time for HR practitioners to allow them to focus on more strategic, valued-added activities; a key element of HR transformation.

These reasons are clearly related, and to some degree re-expressions of the HR challenges set out in section 2.4.

The extent to which the e-enablement of HR has resulted in these tangible and intangible outcomes is still uncertain (Brewster & Sparrow, forthcoming; Caldwell, 2004; CIPD, 2005; Reilly & Williams, 2006).

On the one hand, some surveys have reported quite dramatic reductions of up to 60% in transaction costs, the length of time taken to deal with queries, reductions in inquiries directly to HR and service centres, and reductions in headcount associated with HR administration. In addition, they have also reported increases up to 50% in employee satisfaction with HR and impressive returns on investment, showing payback times of 22 months (Singapore Ministry of Manpower, 2003; Watson Wyatt, 2002; CBI and KPMG Consulting, 2002).

These kinds of benefits are also reported by Ruddy (2002, p 7). Speaking about the e-enablement of HR at BAE systems, he says:

"e-HR is a pot of gold. In year one of the project, what we have is a guaranteed cost reduction of 10% of our HR spend and 15% in subsequent years.... We've had no resistance from staff or line managers. Every employee recognises that the web is very much the way we have to do business round here. So e-HR is embraced rather than pushed back. If there's a problem, it's that our customers, both external and internal are demanding greater enhancements and improvements to our e-HR capabilities. I think

I'm in the lucky position where our internal customers can't get enough of e-HR, which is a great measure of success."

However, it is entirely reasonable to assume that these comments are at least to some degree influenced by corporate 'spin' and do not reveal the fuller picture 'behind the scenes'.

Similar bullish statements, particularly in relation to cost savings, can be found in the literature of the e-HR software vendors. As Harrington (2000) observed, Oracle, a software vendor, reported that in 1998, 60 per cent of its HR effort was dedicated to administration. By 2000 an e-HR system had led to savings of \$1.6 million for each 10,000 of its employees, and it was now employing one HR staff member for each 2000 employees rather than one per 1000 previously.

More recently, US evidence from 2002 studies pointed to reductions of 33-50% in HR staff following the implementation of self-service technology, with forecasts of spending on e-HR set to increase (cited in Gueutal & Falbe, 2005).

Parry et al (2007) cite savings of £120,000 through HR headcount reductions at Norwich Union and anticipated savings of around £100,000 when on-line payslips are introduced. The same report also identified a reduction in absence rates of 50% over six months at East Thames Buses, through the intelligent use of performance information.

The temptation to promote the cost-saving aspects of e-HR, however, may disguise a plethora of tensions concerning the wider organisational and relational impacts. Reddington et al (2005) draw attention to the need to manage the inherent tensions between cost savings and human interaction.

- ~ *"The potential danger of over-stretching on the cost-saving aspects, to the detriment of the 'human side' of HR must be borne in mind. Customer intimacy, a key driver of the perception of service quality, can be compromised if a transactional mentality, driven by cost reduction targets, dominates the service delivery philosophy." (Reddington et al 2005, p 68)*

This tension arises from the fact that customer intimacy, through improved customer service, is one of the benefits singled out in the literature to support the case for e-HR. The premise is that by improving access to HR information and processes, it represents a cultural shift away from the traditional, centralised and hierarchical approach to sharing information and

encourages the perception of a more personalised HR service. (Cedar, 2001) This in turn helps to build and improve employee motivation and performance, through a process where employees feel more satisfied and better able to appreciate and respond to the needs of the business. (Moss Canter, 2000; IES Report 398, 2003; Martin, 2006). The linkages with the concept of segmented customer propositions are evident and appear to suggest that e-HR can make a contribution to improved employee performance.

However, there are a number of cautionary observations and findings that question this central premise. As the IES report 398 (2003, p 38) asserts:

“The jury is still out on whether there is cause or effect between e-HR and employee motivation and performance. HR remains rightly cautious, despite the persuasive logic of the consultants and vendors of how much can really be achieved with technology.”

Other literature (Watson Wyatt, 2002; European HR Survey, 2002) pick up on this point and draw attention to the need for e-HR services to be sufficiently attractive, from a user perspective, to stimulate take up. As John Meelow, an HR practitioner at BP observes, when talking about a significant e-HR project:

“This has not been a challenge putting e-HR on the web, but more to do with getting people to use it. Our IT and HR departments led this project but we needed to start with the business wanting to do it in the first place! We forgot about the people and the processes and didn’t get buy-in from line managers.” (People Management, November 2002).

There are also concerns aimed at the claim that e-HR frees up scarce time for HR practitioners to allow them to focus on more strategic, valued-added activities. Foster (2002) sounds a note of caution about the impact of e-HR on the quality of the human capability within the HR function:

“On paper, taking the administrative work out of HR sounds right, but I sometimes question whether the remaining people have the ability to be more strategic. HR directors must look at what skills they would need in their departments after automating the admin functions.”

Clearly, this begins to surface the concerns about the ability of HR to transform its operations from a human capability standpoint, a vital ingredient of the mix that leads to improved HR services.

The surfacing of these tensions highlights the significant implications for the perception of the role of HR within an organisation and its perceived value contribution. As we have seen, the organisational writing increasingly points towards a role for HR as a strategic enabler of business directions and visions rather than as a passive recipient or 'handmaiden' of business strategy. (Hoogervorst, Koopman & Van der Flier, 2002).

It can also be seen that claims for e-HR vary from the highly skeptical to the highly enthusiastic and complimentary. It is becoming increasingly clear, however, that the majority of opinion appears to support the view that if e-HR is correctly managed and implemented, it will confer various benefits onto the business. This seems to be most pronounced in the efficiency area, because this is an area where an e-HR system should bring about short-term payoffs. Nevertheless, it is significant that data is available confirming that the systems do, to some extent, improve HR services, reduce costs and increase speed. But even here, Lawler & Mohrman (2003, pp 115-116) report that it is *“still unclear whether e-HR systems will in fact result in a significant increase in the perceived quality of customer service.....and what kind of cost saving e-HR systems will generate.”*

The less convincing claims appear to relate to business effectiveness, an area where e-HR has the potential to make a big impact with respect to freeing up scarce time for HR practitioners to allow them to focus on more strategic, valued-added activities. According to Lawler and Mohrman (2003, p 110) this failure may in part be *“because it (HR) has not yet found a way to deliver high quality administrative services without devoting a large amount of resources to them.”*

The conundrum for HR therefore seems to be how to deliver high quality administration services while also making a successful transition to higher value-add services. The point is also raised with some frequency that attention must be given to the aspects surrounding transformation of human capability and that inherent dangers lie in simply viewing e-HR as a technical solution.

Indeed, the review of the literature exposes a range of tensions and dilemmas concerning the claims and counter-claims for e-HR – a position summed up well by Towers Perrin (2002, p 2)

“This gap (between what has been promised by e-HR and what has been delivered) underscores an important fact about technology that more and more employers are now coming to understand: Implementation is only the beginning of the process. The web is just the means to an end, and that end – widespread acceptance of self-service as the ‘way’ to manage HR, for both employers and managers – takes planning, time and dedication. It represents a significant internal change for most organisations, and has to be supported with education, communication, the right tools and processes, and frequent and consistent reinforcement.”

The internal changes mentioned in the Towers Perrin report again point towards the impact on the roles of HR and line managers and the surfacing of the tensions that arise when HR seeks to become more strategic through the devolution of more tasks to the line, through the delivery of self-service. These impacts are now examined more closely and make a contribution to some useful frameworks that seek to explain the links between the strategic drivers for e-HR and their associated outcomes.

2.6. The impact of e-HR on HR capability

The past decade has seen a burgeoning supply of literature that has examined the role of the HR function, within the growing knowledge-based business environment discussed in section 2.2. This provides a good foundation from which to assess the arguments surrounding the development of the HR function, in the presence of an increasing use of technology, such as e-HR.

Overall, there seem to be strong signals in the literature that in order to develop, the HR function must get out of the control and audit role that characterised its more traditional activities, as exemplified in Tyson and Fell (1986) and Storey's (1992) models of personnel roles. Tyson and Fell's 'Clerk of Work' and Storey's 'handmaiden' describe largely administrative roles involving routine duties such as record keeping, preparing letters and basic administration.

An interesting view of the HR function of the future is presented in the Corporate Leadership Council's book, *Vision of the Future* (1995). It projects a gutting of the HR function, as many HR activities are transferred to the line, outside vendors, and high efficiency processing centres. The HR function is expected to focus almost exclusively on business consulting and the management of the organisation's core skills.

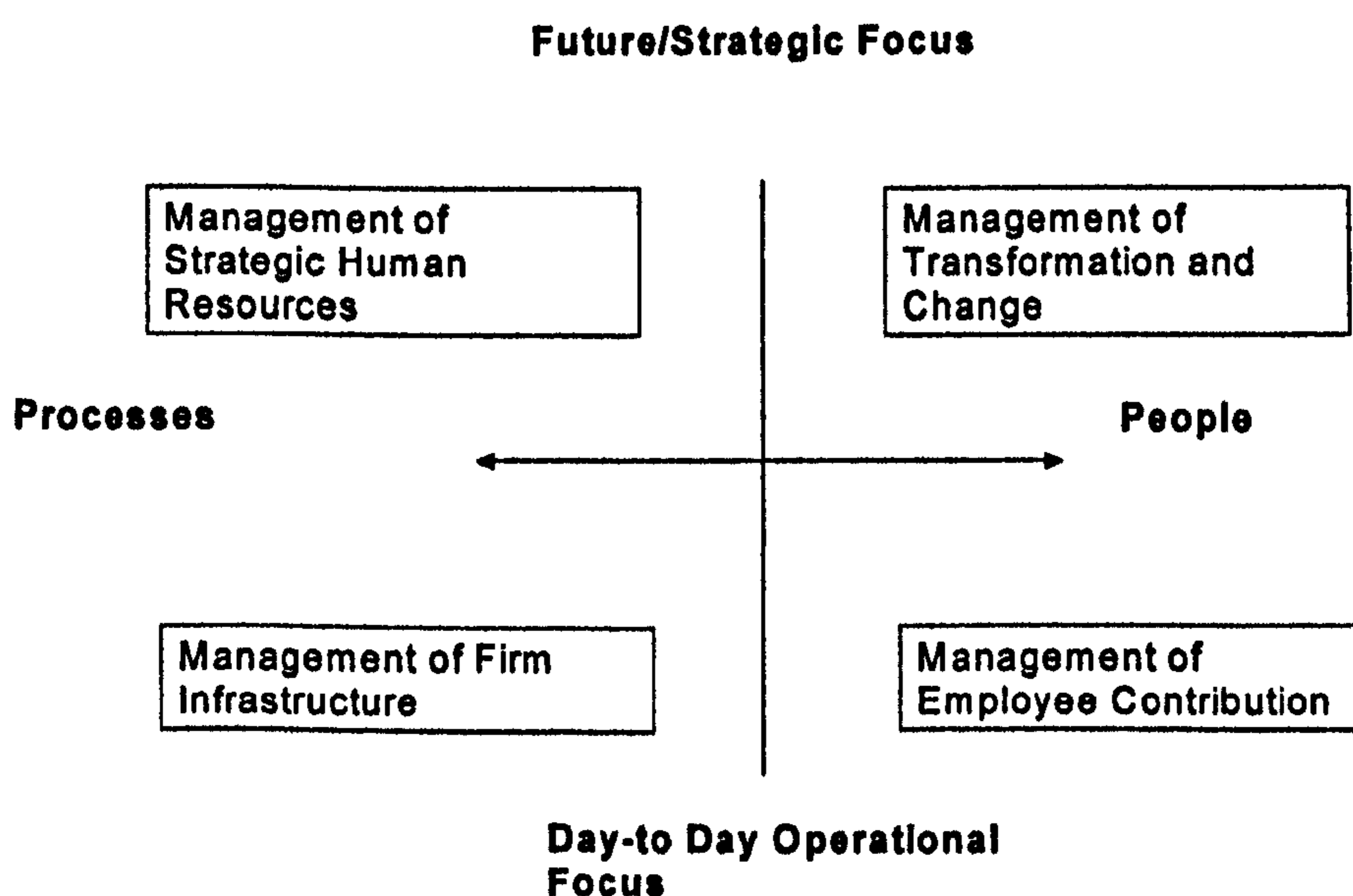
This view is supported by Hutchinson and Wood (1995) and the IRS Employment Trends Survey (1996), which suggest that such administrative roles are diminishing and Hall and Torrington (1998, p 52) also note that HR functions are changing to include more professional staff and fewer administrators as the role of the HR practitioner changes from “doer” to “internal consultant” or “advisor”.

Tamkin, Barber and Dench (1997, p. xi), also observe a strong move towards a more consultative way of working:

“Of all the role changes for HR, this has been one of the most marked. The move itself stems from the growing emphasis on meeting the needs of the customer, and the devolution of responsibility to the line.”

But it is perhaps the work of Ulrich (1997) and Ulrich, Losey & Lake (1997) that is most notable in describing an HR function that needs to be redesigned to embrace a multiple role model – see Figure 6.

Figure 6: HR Roles in Building a Competitive Organization (based on Ulrich, 1997)



Source: Ulrich 1997

The model accommodates the fundamental importance of technology in terms of improving process efficiencies and providing HR with business intelligence.

However, Ulrich (1997, p 38) notes that:

“too often, businesses today esteem the HR strategic partner and/or change agent roles while discounting the administrative expert and employee champion roles as traditional and dated. This thinking drives wedges among HR professionals and weakens the overall effectiveness of the HR function.”

This observation hints at some of the tensions that arise in the HR function as it progresses towards the business partner concept, but there are other tensions. For example, a recent article in *People Management* (October 2006), one of the official publications of the CIPD, draws attention to recent research that questions the validity and effectiveness of this model:

“As HR has sought to become more strategic, value-adding and business-focused, the emphasis has increasingly fallen on the ideal structure for the function – a trend that has been particularly influenced by the writings of US academic Dave Ulrich.

“His writings have built up the popularity of a three-legged model: an HR shared-service centre, centres of expertise, and business partners. In many large organisations, this model has replaced the integrated teams that previously carried out the full range of HR activities, from administration to strategic direction.

Though the three-legged model is often thought of as the norm, our research has highlighted the shortage of evidence – in the UK and Ireland at least – on the extent of its adoption and, more worryingly, on its effectiveness.” (*People Management*, 26 October, 2006, p 62)

The efficacy of the Ulrich model is also challenged in an article by Gratton (2003, p 18), which concerns the perceived fragmentation of HR services, after the Ulrich model had been adopted in an organisation:

“During the past decade, we have fragmented the roles and responsibilities of the function. We have outsourced the lower value, operational work, and we are beginning to develop the staff profiling work that will enable us to act as ‘employee champions’. We also putting the ‘change agent’ roles back into the stream of business to work closely with their line manager partners. Meanwhile, the ‘business partners’ are either going into the business or clustered around ‘best practice centres’ which may be located in

different places.....this fragmentation of the HR function is causing all sorts of unintended problems. Senior managers look at the fragments and are not clear how the function as a whole adds value.”

It is evident that variances exist in the meanings attached to the terms 'business partner' and 'strategic partner'. According to Lawler & Mohrman (2003, p 117), *“playing the business partner role entails solving problems and making decisions that involve important values, are highly uncertain and are context-specific”* whereas the role of strategic partner *“can only be performed by individuals who have a good understanding of business strategy and as well as of HR strategy.”* Further, the *“HR’s strategic partner seat at the table can only be filled by someone who is a senior executive in the corporation....,”* which implies the role is more senior to the business partner.

This is contested by Ulrich (1997, pp 37-38) who argues that, *“Too often, however, the term business partner is narrowly defined as an HR professional working with general managers to implement strategy, that is, working as a strategic partner..... Today, a more dynamic, encompassing equation replaces the simple concept of business partner. Business Partners exist in all four roles defined in the multiple role model, not just the strategic role.”*

While this illustrates that variances exist in terms of the definitions attached to the HR business partner type roles, there appears to be strong consensus in terms of the general thrust of these roles in the new knowledge economy. The argument is that a company's strategy is closely linked to its human talent. An HR function that is positioned and designed as a business or strategic partner participates in both strategy formulation and implementation because expertise in attracting, retaining, developing, deploying and motivating human capital is critical to both.

But in contrast with the apparently compelling arguments supporting the move to business partners, HR executives often fail to achieve this transition (Eichinger and Ulrich, 1995; Wright, Dyer and Takla, 1999; Smith and Riley, 1994; Becker and Huselid, 1998, 1999; Ulrich, Brockbank, Yeung and Lake, 1995; Lawler, 1995; Kenton & Yarnell, 2005, Reilly and Williams, 2006). Instead, the HR function is still seen largely as an administrative function headed by individuals whose roles are focussed on cost control and administrative activities (Ulrich, 1997; Lawlor, Cohen and Chang, 1993; BNA, 1994). Other critics such as Sparrow and Daniels (1999) accuse HR departments of being the last bastions of bureaucracy in organisations and argue that the command and control approach they use actually impedes rather than facilitates progress to strategic goals.

Yet, despite this, *"Promising signs indicate that, with high quality IT applications, HR professionals can indeed create the focus and time to be business partners."* (Lawler and Mohrman, 2003, p 83)

The Lawler and Mohrman (2003) study is quite clear that increased use of IT for transactional and other HR services may free up the time of HR professionals and shift their focus away from transactions to more value-added business partner activities. The study goes on to say that *"IT applications have the potential to fundamentally change the way organisations manage and deliver HR."* (p 63)

But the study also acknowledges that while HR is taking on new roles it is not necessarily shedding its old roles, and that comprehensive use of IT to free up time has not yet happened in most firms. The researchers suggest that this may be because there is not enough pressure to change. The HR function is satisfied with its current role and comfortable delivering services in a traditional mode; the customers are also satisfied with an administrative function that removes what they perceive as onerous HR responsibilities from them, and they are not asking for change. This leads to 'institutionalised devaluation' of the HR function by the rest of the organisation.

This situation highlights a paradox for the HR function. Institutionalised devaluation of the HR function is connected with the perception of HR being stuck in a primarily administrative role and lacking the capabilities to occupy the higher value, business partnering role. And yet, *"If the basic HR processes such as administrative activities are not in good order, especially on sensitive issues such as executive pay, no strategic contribution is likely to be considered of value until the administrative problem has been fixed."* (Holbeche, 2001, pp 17-18).

Perversely, HR teams which concentrate on administration and policing policy *"have been seen as expensive: a necessary evil consuming resources disproportionate to the value they add to the company."* (Lawler and Mohrman (2003, p 6)

Another view, termed by Legge (1995, pp 27-28) as the *"vicious circle in personnel management"* also exposes the difficulties for HR practitioners in moving to higher value roles. Because senior managers do not necessarily involve the HR function in mainstream planning, it results in "people" issues being accorded insufficient attention at early stages in the decision-making process. Problems inevitably arise with new initiatives or with routine

business issues because HR has not been involved - such as difficulties with poor recruits, inadequately trained staff or stoppages of work. At this stage, the HR practitioners are asked to help resolve the crisis. Short-term solutions to immediate difficulties merely store up trouble for the future because insufficient time is allowed to introduce the solutions properly. Accordingly, HR gets the blame for not being able to resolve the problem, and so continues to be excluded from major decisions, thus completing the vicious circle.

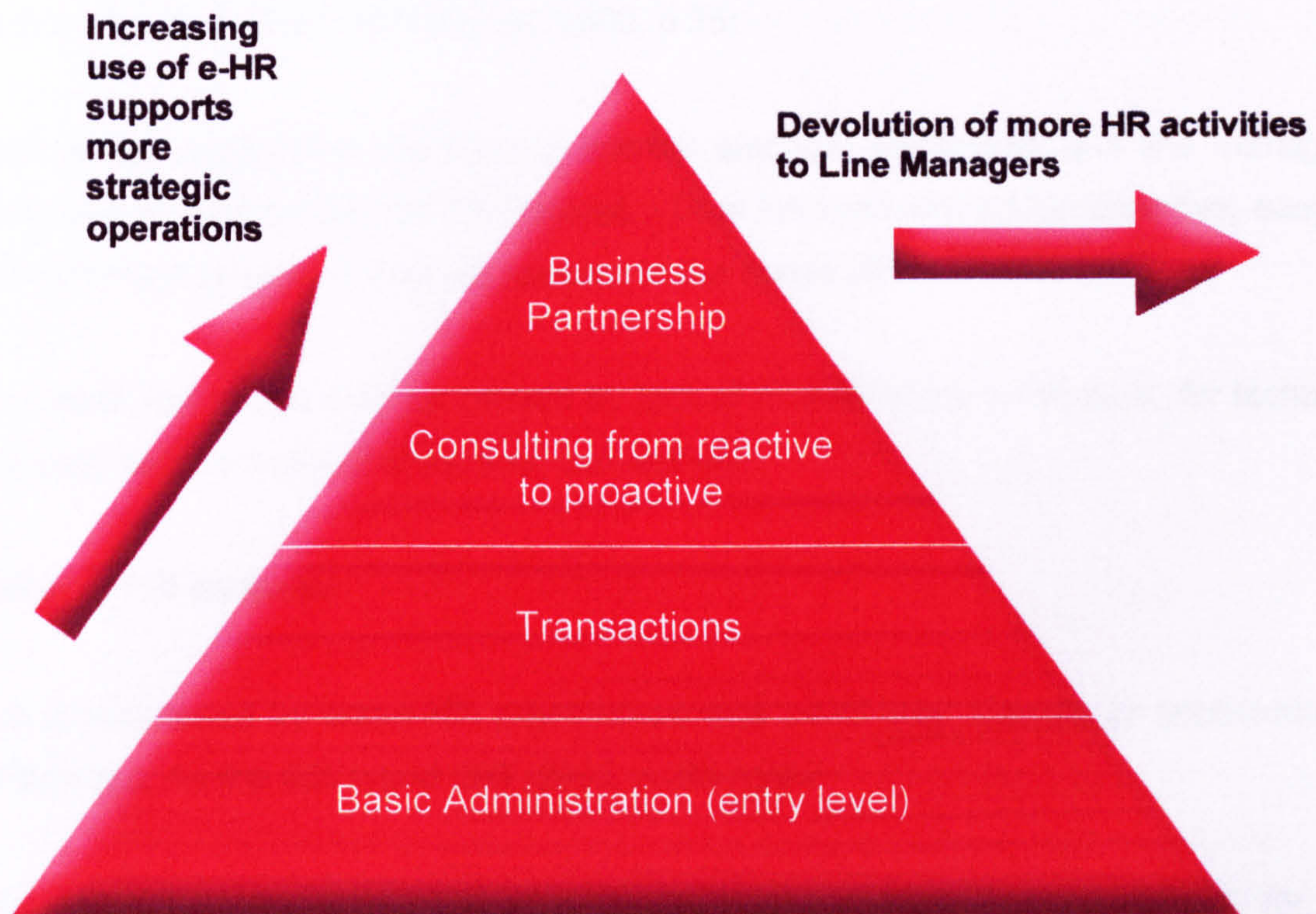
So the paradox that HR must resolve is to manage the progression to the business partner roles, whilst at the same time protecting the integrity of the more traditional administrative role and also responding to pressure to cut costs. It is seemingly a paradox that the HR function must solve, or it may be *“seen as interfering, irrelevant or a waste of space, leaving considerable scope for improvement in its approach and contribution to high performance in organisations.”* (Philpott, 2004)

This supports the view that HR practitioners may be perceived as out of touch with commercial realities, unable to comprehend the nature of the business, its customers, or its corporate goals and leads to allegations that they base their decisions on principles that have little relevance for competitive prospects.

It is here that the use of technology, and in particular e-HR, purports to offer a solution and effectively break the logjam that prevents HR from increasing its capabilities and changing its business model. As Lawler and Mohrman (2003, p.110) put it: *“The results suggest that an investment in a high quality e-HR system should increase the HR function’s credibility and the perception of value it adds, while decreasing the time the function spends on administrative tasks.”*

However, the adoption of e-HR in this way involves more displacement or devolution of traditional HR activities into the line manager communities, often through web-based, self-service tools. This is illustrated in the ‘HR Value Pyramid’ featured in Figure 7 below, adapted from Reddington et al (2005).

Figure 7: HR Value Pyramid



Insofar as HR transforms its operations to new, higher level roles, through the liberation provided by e-HR, does this liberation extend to line managers through the progressive devolution of HR activities, or are there competing effects, as suggested by the literature examined in section 2.2.

2.7 The Impact of Devolution on Line Manager Roles and Responsibilities

There is a general paucity of literature that directly addresses the impact of e-HR on line manager roles and responsibilities. However, some notable contributions - see Reilly (2000), the IDS Study (2001), Watson and Wyatt, 2002, European Survey (2002), Towers Perrin (2002), Reddington et al (2005) - highlight a number of challenges which organisations face when introducing e-HR. These mostly concern the possible drawbacks relating to the adoption of self-service HR tools and include:

Low Usage

Low usage is linked to the problem of providing a generic system, or one that is consciously *“designed for the HR function and not the line managers who should be the real custodians of people and performance”* (IES Report, 2003, p 35).

A further related problem is maintaining interest amongst employees and line managers once they are enticed to use the HR intranet. Thus intranets should be attractive, easy to use and well maintained and seen as relevant to the needs of the line manager.

In other cases, low usage may be caused by lack of access to the e-HR tools, for technical reasons such as poor internet or intranet connectivity.

Alienation of HR Services

Concern is expressed by some HR practitioners that e-HR may alienate or depersonalise the HR function. As the IES report 398 (2003, p 35) notes:

“The loss of face-to-face contact with employees makes it more difficult for HR practitioners to ‘take the temperature’ of the organisation and may produce a depersonalised service”.

Others, such as Kath Lowey, Head of HR at Marconi Corporation, warn against seeing technology as a panacea for the delivery of HR services.

“Although technology, processes and systems will play a big part in HR service delivery, I don’t ever want to lose the human touch, because that’s what we’re about and we have an important responsibility in this area. For example, in the area of employee welfare, I have a team member who solely focuses on this - he’s fantastic at it - and he goes out and deals with people, and that is a very proactive and very well-received service we provide. You can’t automate something like that.” (Reddington et al., 2005, p 219)

However, the Lawler and Mohrman study (2003) has a different perspective on the situation:

“One positive note in the ratings of e-HR effectiveness is that 65% of the respondents say that the systems do not alienate employees. This is important because some HR professionals feel that impersonal computerised services replace the human touch and cause employee alienation.” (Lawler & Mohrman, 2003, p 69)

Beyond these impacts, it becomes necessary to interpret the broader findings of studies and other published literature that deal with the impacts of devolution of HR activities to line managers.

2.7.1 Rationale for Devolution

Legge (1995) confirms that human resources management is *‘vested in line management as business managers responsible for co-ordinating and directing resources in the business unit in pursuit of bottom-line profits’* (cited in Gratton et al, 1999, p 133). Armstrong (1998, p 13) also recognises that human resources management *“is essentially a business-oriented philosophy concerning the management of people by line managers in order to achieve competitive advantage.”*

It can also be asked however, ‘how new’ is the idea that people management is a manager’s responsibility. Has it always been part of the management ethos that managers should have people management responsibilities? Is the devolution of implementation of HR policies and procedures merely an attempt by HR Departments to get managers to manage and fulfil the entirety of their management responsibilities? Management theory from different decades, including Drucker (1955), Stewart (1963), Mintzberg (1973), and Sims et al (2001), include responsibility such as ‘motivating’, ‘hiring’ and ‘people development’ as well as other more operational responsibilities. As Mintzberg (1973, p 96) sums up; *“he [the manager] defines the milieu in which they [his subordinates] work, motivates them, probes into their activity to keep them alert and takes responsibility for hiring, training and promoting them.”*

The possibility of increased line manager involvement in HRM largely surfaced in the British and American literature during the 1990's. Storey (1992) detected some shifts in the early 1990s when line managers were at the forefront of various change initiatives, not least of which concerned significant de-layering and decentralising of management decisions as businesses fell victim to "corporate liposuction" (Collinson and Collinson, 1995 cited in

Denham et al, 1997). By the mid-1990s, Hutchinson and Wood (1995) reported greater line management involvement in personnel issues compared with five years before, devolution often being accompanied by decentralisation within the organisation and with greater local financial autonomy and responsibility.

More recently, the concept of “partnerships” being formed between HR and the line has been the subject of a rich seam of literature (Hall and Torrington 1998, Eisenstat, 1996; Hutchinson and Wood, 1995; Ulrich, 1997, 1998, 2001; Storey, 2001; Brewster and Larson, 2000; Currie and Proctor, 2001; Holbeche, 2001; Renwick, 2003; Bell et al. 2006)

This concept emphasises that in order to ‘add value’ and ‘deliver results’ HR practitioners are encouraged to be accepted as “business partners” by their senior management colleagues. As Ulrich (1998, p129) notes, *“to be truly tied to business outcomes, HR needs to join forces with operating managers to systematically assess the impact and importance of initiatives”*. Holbeche (2001, p 444) also notes that, *“alignment between business and HR strategies begins with a partnership approach.”*

The partnership concept recognises that it is simplistic to assume that HRM should be undertaken either by line managers or by the HR function as separate entities. Instead, it is advocating recognition that ultimately it is line managers who have overall responsibility for putting HR into effect, and that trying to create partnerships with HR personnel represents a viable way forward.

While this pivotal role for line managers has been emphasised in theory, evidence from the Cranfield Price Waterhouse project (cited in Hall and Torrington, 1998, p. 45) suggests that that the trend of devolution in the UK has been exaggerated: *“UK Personnel Managers are more likely than other countries to report sole responsibility for a range of personnel issues rather than sharing or giving them to the line.”*

The 1998 Industrial Society Survey, however, found that 67% claimed to be devolving greater responsibility to line managers and similarly, the IRS Management Review (1998) found that 68% of organisations in their study had partially devolved a range of responsibilities in the previous 3 years and, in the same period, 49% had completely devolved at least one HR task.

According to the IRS Employment Trends Surveys (1994, 1996, 2000) and Armstrong (1998), the research illustrates that what is being devolved and how it is being devolved, varies considerably between organisations. On the question of HR policy, for example,

often an impregnable bastion of the HR function, the IRS Management Review (1998, p 22) highlights that *'although HR policy formulation is usually retained by the HR function, it is now much more likely to be carried out in conjunction with line management.'*

Thornhill and Saunders (1998, pp 460-476), echo these findings: *"the reality is that in many organisations the role for line managers in the management of human resources has changed or is changing."* Research by Truss and Katz (2002, p 24) corroborates these findings: *"General Managers were given almost all control over the day-to-day management of their staff, reflecting the broad trend towards the devolution of HRM to line managers."*

The benefits of the devolution initiatives are detailed in various literature. Good examples include Sisson and Storey (2000, p 219), IRS Management Review (1998, p 24), Renwick (2000, pp 179-2001), Budhwar (2000, pp 141-157), Brewster and Larson (2000; pp 196-98). These sources identify the following benefits that flow from the devolution of HR responsibilities to line managers:

- Decisions to be tailored to suit local circumstances
- Decisions to be taken more quickly
- More problems to be solved at a lower level
- More responsible line managers
- Potential cost savings by reducing overhead costs by automating routine administrative functions, eg record keeping or payroll. This simplification of transaction processing facilitates more fundamental reviews of the design of HR processes.
- Shorter lines of communication
- Increased awareness of people management issues throughout the organisation
- Better change management
- Improved efficiency of employees
- HR practitioners to pursue a more strategic role

Conversely, however, while potential benefits are outlined, for many years there has been immense speculation about the advisability of devolving human resource management tasks to line managers and the literature raises a number of issues and dilemmas.

On the one hand it is argued that HR resides properly with the people directly responsible for supervising staff whose primary purpose is to manufacture products, sell goods and equipment, or to provide a public or customer service. Examples include Hall and

Torrington, (1998) Ulrich (1998) Cunningham and Hyman (1999), Sisson and Storey (2000). While there might be problems ensuring that these line managers have sufficient knowledge and skills to supervise staff effectively and consistently, it is nevertheless maintained that these individuals are in the best position to adopt the most appropriate HR styles and practices. Moreover, their solutions are more likely to tie in with business realities and therefore contribute more overtly to organisational goals and performance. Having ultimate responsibility may also enhance line management ownership of these issues, and so increase their commitment to integrating HR with other objectives.

Some practitioners have suggested that the HR function could be significantly reduced in size and outsourced if line managers are given and accept this responsibility (John, 1998; Cooper, 2001).

On the other hand, there are claims that effective HRM cannot be delivered by line managers whose primary responsibilities lie elsewhere, namely in meeting service or production goals, and who have scant regard for learning how to find ways to get the best out of their staff. Under this scenario, it is argued that line managers are bound to need continuous and systematic support and training from HR specialists to ensure that they do not make mistakes that can be costly at a later date (Earnshaw et al., 2000; Renwick, 2000; Marchington and Wilkinson, 2002; Gratten et al., 1999; Holbeche, 2001).

A further examination of the nature of the HR/line manager relationship reveals that many of the criticisms, as seen by line managers, seem to concern the lack of contribution by HR functions to organisational performance. Broadly, this seems to take one or more forms:

Lack of Clarity of Roles

Bevan and Hayday (1994) found that managers were not adequately consulted about the devolution of responsibilities and were, therefore, unclear about their roles. *'Devolution without a clear articulation over responsibilities which line managers are expected to perform frequently results in a problem of role conflict [and] ... ambiguity.'* (p 9).

This view was also supported by the IRS Management Review (1998); *'unless clear boundaries are established outlining the roles to be performed by both parties and the nature of the relationship, there could well be conflict between them'* (p 22). Also significant here is the reluctance of some managers in taking on these new roles which they perceive to be the job of the HR function. Line managers may need persuading that managing

people is their job. HR specialists may also be unwilling to let responsibilities go (Hall and Torrington, 1998, p 52). Lack of clarity of individual roles, the relationship between the HR function and line managers may, therefore, limit the effectiveness of devolution.

A further example is in the area of absence management. The Dunn and Wilkinson (2002) study found that most responsibility in everyday cases rested with line managers, but some organisations had an *ad hoc* approach, with unclear HR and line responsibilities, producing "a case of muddling through" (Dunn and Wilkinson, 2002, p 245).

Inconsistencies in Implementation

Devolution of HR responsibilities to line managers can also lead to inconsistent implementation of policies within organisations. The 1998 IRS Management Review found that 'maintaining consistent decision making across the business is the most important issue arising from HR devolution', apart from the need for specialist line management training (p.28). A further, related concern is the ability of individual line managers to carry out HR activities with the same degree of professionalism as the HR function. Deterioration of quality is therefore a risk raised by devolution. Greater line manager control may result in employees being treated inconsistently, standards not being maintained and the formation of sub-groups which do things differently.

Brewster and Larson (2000) also raise concerns about the capability of the line to learn about HR work effectively and to use this knowledge fairly and consistently when treating employees.

Increased Work Load

Many organisations have flat, de-layered structures, which increase line managers' spans of control. This places pressure on the time line managers have for people management activities and could affect the effectiveness of devolution; *'quite often managers do not have time to observe all their subordinates... this results in evaluations that are based on impressions rather than observable facts and actions'* (IRS Management Review, 1998, p 22). The impact of de-layering on managers' jobs generally is significant. *'They still have to achieve at least their previous level of performance while taking on more managerial responsibilities'* (McGovern, 1999, p 150).

Other issues include the extent to which line managers are being forced into taking on increased responsibilities in HRM in a climate of fear and mistrust driven by HR, where for

"hard-pressed managers faced with a continuing escalation in the range of their HR responsibilities the outcomes did not justify the time and effort spent on it" (Harris, 2001, p 1187). The line is also seen as being "the filling in the sandwich" as HR work is "dumped" on them via devolution (McConville and Holden, 1999; Deeks, 2000).

Lack of Institutional and Personal Incentives

The 2000 IRS survey found that about 60 per cent of its respondent organisations had experienced problems with the devolution of HR activities to line managers. It was found that because line managers have many other more pressing priorities than managing and developing the people working for them, it is likely that people management issues will be taken less seriously than production or service goals. At the "leading edge" organisations studied by Gratton et al. (1999), line managers did not feel any institutional pressure - through their own performance criteria - to consider HRM issues seriously because they were low on their list of priorities. Even at these supposedly progressive organisations, "people management" did not appear in formal or unwritten performance expectations. Line managers reported frustration that they were not able to devote sufficient time to HR issues - such as appraisals - because "harder" priorities tend to dominate (Cunningham and Hyman, 1999, p 25). Without explicit proactive support from senior managers, and recognition and rewards for their work in the HR area, it is perhaps easy to understand why line managers did not regard this part of their job highly.

According to McGovern (1999), individual managers' performance objectives should formally state their human resource activities. Line managers should be evaluated to assess whether they are carrying out their new personnel roles correctly. Research has found that, even where performance objectives include line managers personal responsibilities, few managers consider successful implementation of these to be 'important' or 'very important' factors in their performance appraisal (McGovern, 1999, pp 140-143). This reveals that managers do not feel strong institutional pressure to perform in those aspects of their job that encompass HRM. Another important signal is the example set by the managers own manager. As stated by Hall and Torrington (1998, pp 43-44), *"the way these managers are in turn managed by their own manager provides a role model and demonstrates the commitment, or otherwise, of senior managers to the change which is being implemented."*

Lack of Adequate Preparation in Training and Skill

Hoogendoorn and Brewster (1992) found that line managers did not feel sufficiently skilled to carry out people management activities (cited in Hall and Torrington, 1998, p 531). The IRS Report (2000, p 12) also quotes several examples where skill gaps had been identified in terms of the breadth of management responsibilities and confidence in the role. Drawing on a study of 28 organisations, Gennard and Kelly (1997, pp 34-5) argue that line managers are unlikely to acquire sufficient skills in the HR area without continuing support from HR specialists. McGovern et al (1997, p 14) suggest the low educational and technical base of line managers in Britain is a significant constraint on the effective devolution of HRM in Britain. Cunningham and Hyman (1999, p 18) provide examples of inadequate training for line managers expected to take on extra responsibilities. The faddish nature of many management interventions, and the demand for instant success, also relies upon new initiatives being implemented without full and effective preparation (Marchington and Wilkinson, 2002). It also leads line managers to take new ideas less seriously because they expect these to be jettisoned when the next fashion appears.

Lack of Support from HR

Lack of skills in the HR practitioner in adopting their new role of business partner may limit the effective support provided to line managers and therefore affect the success of devolution. The IRS Management Review (1998, p 22) comments that *"the HR function itself may experience problems in adjusting to its new support and advisory role."* As stated by Hall and Torrington (1998, p.52); *"consultancy, counselling and coaching may be very new experiences for some... staff may not have the skills to make it happen... the support available for line managers may be inadequate."*

Watson (1986, p 204) brings a more acerbic perspective to a lack of HR support, by fundamentally criticising their motives:

"If personnel specialists are not passive administrative nobodies who pursue their social work, go-between and fire-fighting vocations with little care for business decisions and leadership, then they are clever, ambitious power-seekers who want to run organisations as a kind of self-indulgent personnel playground."

Transition to 'Partnership'

The literature review has identified a number of factors that come into play when more HR activities are devolved to line managers. It would also seem to be relevant and appropriate to examine other factors that could arise as a consequence of the move towards a 'partnership' between HR and line managers.

As this process unfolds, the framework of the psychological contract may provide some insights into the psychological transition issues that will surround the changing relationship between HR and line managers.

Ulrich (1997, p 236) widely acknowledged as one of the key contributors to the concept of partnerships between HR and line managers, explains his position thus:

"Partnerships ensure that, while both parties bring unique competencies to their joint task, their combined skills are more than the sum of the parts. Partnerships imply mutual respect, with partners working toward common goals in a process enriched by varied perspectives. Partnerships encourage debate and differences, but ultimately find common ground on which conflict is replaced by commitment. A true partnership exists where observers at a staff meeting cannot readily tell the HR executive from the line manager, because both clearly focus on business results."

The main elements of Ulrich's partnership concept, which centre on 'commitment' and 'achievement of business results', are supported by the Involvement and Participation Association (1992) and Marchington (1998), but importantly they are also expanded to explicitly include communication, trust, participation, involvement and empowerment. If the transformation of HR services follows a partnership concept, therefore, one would expect to see the presence of these aspects in the developing relationship.

Participation and Involvement

Marchington (1995) argues that the terms participation and involvement are synonymous, with perhaps involvement being a more fashionable term. However, Blyton and Turnbull (1998) argue that the simple definition of participation (eg interaction between workers and managers which results in workers influencing decisions) obscures the essential features of the process and that it is necessary to probe into more depth at the organisation level to discover its purposes and outcomes.

The work of Poole and Jenkins (1996) and McCartney and Holbeche (2005) suggest that in the UK at least, managers are in general in favour of greater employee participation or involvement, but this needs to be tempered with the often immense gap between espoused organisational processes and the reality on the ground (Marchington, 1995). Unless managers put them into practice whole-heartedly, rather than going through the motions or ignoring them entirely, they will have an adverse impact, or at best no impact at all. One of the reasons why line managers often fail to buy-in is that involvement processes have frequently been introduced as one-off initiatives rather than as part of an overall change of organisational strategy (Huczynski, 1993).

This may be because organisations are hesitant to surrender any real degree of decision-making power (Das and Teng, 1998). Alternatively, they may be complying reluctantly with legislative requirements or there may be an insidious attempt to create the feeling or perception of participation, through an internal marketing exercise, with different interest groups of employees forming niche markets for the target communications. Such participation 'is inauthentic' and creates cynicism or worse when the ploy becomes transparent (Heller, 1998). Hence, attributions by employees are likely to be unfavourable towards management unless their experience matches the rhetoric (Wilkinson, Marchington, Goodman and Ackers, 1993). For example, they may infer that management is simply trying to get more work, responsibility and ideas out of them without increasing the support or reward it is prepared to give in return. It may also be felt that their influence is limited to suggesting rather than participating in decisions, that it relates only to day-to-day working practice or that the consultation seems to be occurring after the decision rather than before it

Whatever the attribution of management's motives drawn around employees, the consequent lack of trust is likely to shatter the assumption that partnership will result in a win-win situation. Indeed, moves towards partnership can result in conflict rather than co-operation. The reason for such a counter intuitive outcome derives from the interests of the two parties. Thus, while *co-operation* is the natural policy for both parties to follow when the focus is on shared interest, *conflict* is the equally natural order of the day when it is on conflicting ones (Ring and Van de Ven, 1994; Seal and Vincent Jones, 1997; Edwards, 1998).

This situation is also neatly summarised by Herriot (2001, p 93)

"If the rhetoric of partnership is not matched by the experience, employees will feel in dispute with management. They will see the extended glove of Partnership as concealing the iron hand of control."

Empowerment

Empowerment practices are perhaps best understood as a subset of participation and involvement (Herriot, 2001).

Much of the mainstream literature (Bryman, 1991; Mitchell Stewart, 1994, Argyris, 1998; Clutterbuck 1998) acknowledges that the use of the term 'empowerment' seeks to persuade employees that some power is being surrendered and handed over by management to employees. It is much more explicitly aimed at hearts and minds and confers the greater promise of being one of the corner stones of employee commitment (Walton, 1990).

However, as with participation and Involvement, unless empowerment is one of a bundle of human resources processes which themselves derive from and reinforce a participatory culture, it is unlikely to have any beneficial outcomes (Pfeffer, 1994; Huselid, 1995).

What is more, the greater promise implied in the label 'empowerment' is likely to lead to greater cynicism if that promise is broken. In particular, if the added discretion offered by empowerment is offset by increased accountability and responsibility and no extra pay, the new empowerment deal may appear to be no more than a confidence trick (Cunningham, Hyman & Baldry, 1996)

Indeed, Morrell and Wilkinson (2002, p 121) make the point that *"empowerment can become a weasel word, framed in smoke, aggrandised by mirrors. The 'smoke' of empowerment may hide the fact that there is no real increase in workers' power.....the 'mirrors' of empowerment may exaggerate the benefits to employees of increased responsibility or 'ownership'...and empowerment simply becomes a slick piece of re-labelling designed to get more for less."*

2.8. Exploring e-HR outcomes

This section seeks to pull together the main strands of the literature reviewed so far and point towards the development of an organising framework that can lead to the modelling of e-HR outcomes.

It is already apparent that little published information exists that explicitly seeks to explore the impact of e-HR on the HR function and line manager populations. Two recent reports (Lawler and Mohrman, 2003; Martin 2005) draw specific attention to the need for more research in this area. Additionally, in the Lawler (2003) study, it makes the telling point that no line managers were participants in the study. This appears to be a common occurrence in surveys that seek to establish the current position, or trends and future directions for the role of HR in business.

The dangers of omitting line managers from this kind of work were also articulated in a CIPD report (2002), which refers to the *“weakness of research that asks a senior HR manager to complete a questionnaire about HR in his or her firm and then relies on those responses for analysis.”* (note 13)

These findings add weight to the relevance and nature of my research, which seeks to unpack in more detail how the outcomes of e-HR are perceived by both HR and line managers.

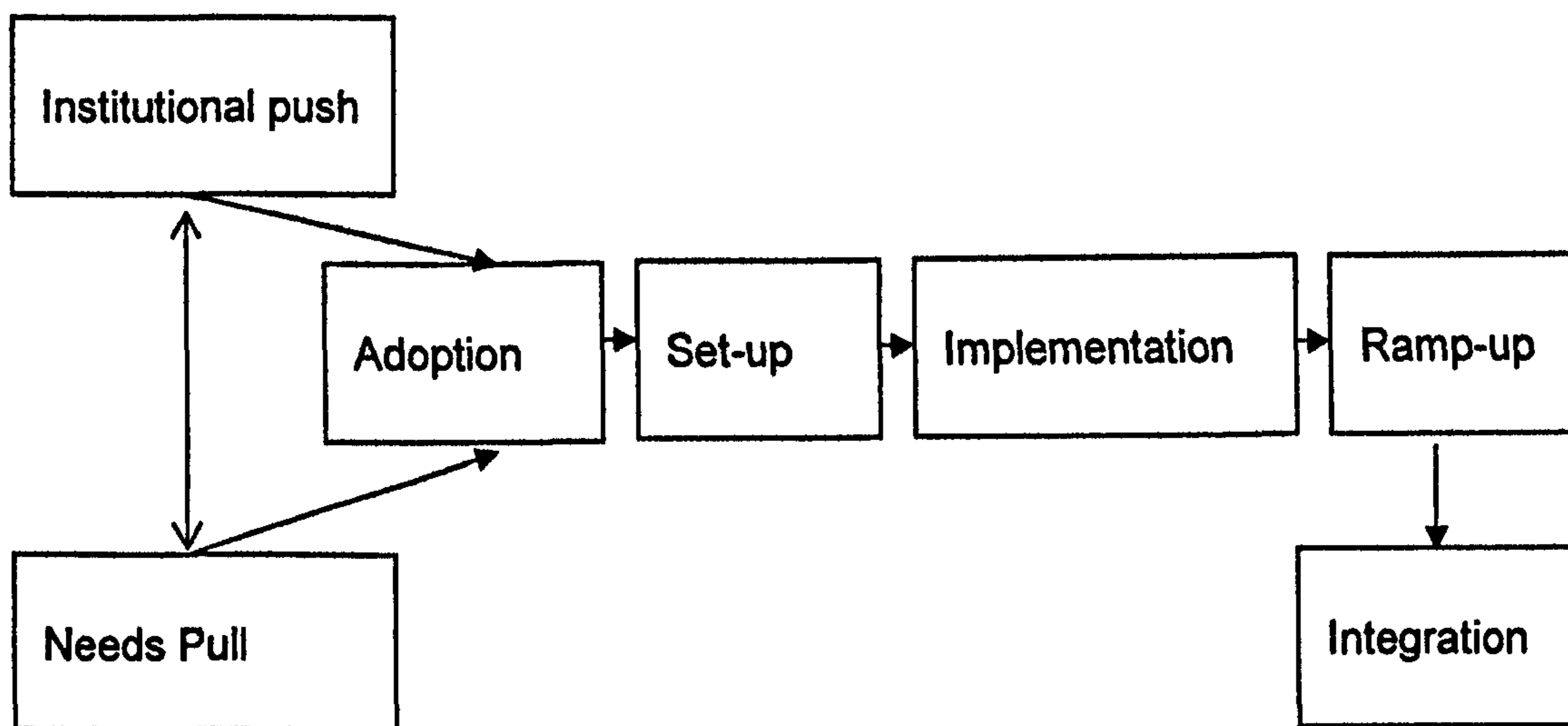
2.8.1 Modelling e-HR and Associated Forms of Service Delivery

There have been few significant developments to date to provide overall theoretical models for explaining e-HR adoption. Useful frameworks in this field are emerging, however, all of which are based on variations of the *adoption-diffusion-exploitation model of innovation*.

The usefulness of the adoption-diffusion-exploitation model is perhaps best explained by Leseure et al's (2004) extensive review of the literature on the innovation of administrative practices, which has been prompted by the criticisms of the UK's much highlighted productivity problems and its failure to innovate such practices (Bessant, Kaplinsky & Lamming, 1999).

In mapping out the process of adoption of 'promising' practices, defined as, *"management practices that are new to the organisation"*, (Leseure et al, 2004, p 1) they have described a 5-stage process - see Figure 8.

Figure 8: Model of Adoption of Administrative Innovations (based on Leseure, Bauer, Birdi, Neely & Denyer, 2004, p 20)



This is driven by a combination of 'institutional push' (imitation and pressures from social and organisational networks, supply chain pressures, legal regulation, modelling of best practice, leadership training, consultants and vendors, etc) and 'needs pull' factors (perceived needs and opportunities, poor performance, crises, problems, etc).

This outline framework forms the basis of the ideas underlying three further models that deal more explicitly with technology and HR applications. The first of these is by Shrivastava & Shaw (2004), which is probably the most extensive review of the extant literature in this field. This model focuses on the potential 'liberation of HR' by conflating the five stages in Figure 8 into three. The adoption phase considers the drivers underlying the decision to use technology, needs (or requirements) analysis and the technology constraints e.g. whether to buy or build the technology; the implementation phase includes expectation setting, the systems implementation process and associated change management; and institutionalization, refers to the embedding of technology and how it has changed working practices and liberated HR for value-added contributions.

Whilst Shrivastava and Shaw's review and modelling of the e-HR innovation process has identified these important technology-specific, project management and organisational change factors, it is perhaps less helpful in highlighting some of the institutional and internal political drivers of technological decisions, such as the role of social networks, fashions and fads, and previous experience of technology by key individuals; they also have little to say about important moderating variables such as the attitudes and competence of clients and employees, and key industry variables such as the very different rates of IT spend per employee in different sectors, e.g. finance vs health.

These perceived deficiencies in the Shrivastava and Shaw model are addressed, at least partially, by two other models - Florkowski & Olivas-Lujan's (2006) survey -based model and Ruel et al. (2004) who made use of the 'Harvard' model of HRM developed by Beer et al (1984) to link e-HR to HR outcomes.

In the Ruel et al model, the HR policy framework accommodates three types of HR policies - the bureaucratic policy, the market policy and the clan policy - each defining an organisation's approach to the type of operational environment, both technically and socio-economically. This HR policy framework is seen to influence the purpose-driven choices made by individuals and groups within the organisation to e-HRM.

The model also attempts to explain *types* of e-HRM as "choices for an approach to HRM" (p 368) in accordance with the three areas of operational, relational and transformational HRM defined by Lepak and Snell (1998) and set out in section 2.4. Depending on the *goals* to be achieved, different technology approaches would be adopted to generate the anticipated *outcomes*.

Ruel et al importantly draw a distinction between goals and outcomes, accepting that there is a danger of confusing the two. As they explain, "*By following a specific e-HRM direction, an organisation expects to achieve certain goals: an improvement in the HR's strategic orientation, an improvement in client focus and satisfaction and a decrease in costs or increased efficiency*" (p 369). But they go on to explain there are other so-called 'overall' organisational goals that can be distinguished regarding an organisation's 'social capital' and that all HRM activities (including e-HRM activities) will implicitly or explicitly be directed towards the overall goals, distinguished by Beer et al (1984) as *high commitment, high competence, cost effectiveness and higher congruence*. High commitment implies a high level of trust between management and workforce. High competence points towards the capacities of employees to learn new tasks and roles if the circumstances require it. Cost

effectiveness refers to the competitiveness of pay levels and employee turnover rate and to the acceptability of costs resulting from employee resistance such as strikes. Higher congruence is concerned with internal reward systems and employee productivity.

Ruel et al. make the point that *"depending on the way individuals and parties want to be affected by e-HRM, in line with the defined goals, outcomes will to some extent emerge"* (p 369). These outcomes are characterised in the model as being aligned with the overall goals described earlier.

The Florkowski & Olivas-Lujan (2006) survey model attempts to explain the factors that contribute towards the diffusion of Human Resource Information Technology (HRIT), including e-HR, into organisations. Their model draws upon diffusion of innovation theory and assimilates data from 216 organisations across multiple sectors and nationalities. Through the application of a mixed influence diffusion approach (Teng, 2002) the study endeavours to provide more robust insights into the dynamics of the diffusion process. They acknowledge that recent studies (Watson Wyatt, 2000, 2002; Cedar, 2002) report the incidence of different types of HR software but fail to investigate the process by which these innovations spread from one organisation to another.

The survey suggests that HRIT diffusion is fuelled primarily by interpersonal communications among potential adopters but equally highlights the paucity of studies in this area, and identifies a *"pressing need to document the effects that HRITs have on HR staff, the larger HR function and the firm"* (p 706).

Other concepts which have been used in the management literature draw on the powerful notion of *absorptive capacity* (Cohen & Levinthal, 1990; Zhara & George, 2002). Absorptive capacity has been used quite widely to explain the different rates of adoption and diffusion of ideas, knowledge and technologies in organisations and across national boundaries. This can be linked with previous work on *receptive contexts for change* (Pettigrew, Ferlie & McKee, 1992) and more recent ideas on *readiness for change* (Jones, Jimmieson & Griffiths, 2005), *technology acceptance models* (Davis, 1989; Bondarouk & Ruel, 2005) and on *institutional dynamics* to explain the adoption, diffusion and exploitation of e-HR in organisations.

According to Cohen and Levinthal (1990), each organisation has a certain capacity for knowledge acquisition based on its ability to recognise, assimilate and utilise new knowledge. These researchers described this 'absorptive capacity' as *"an ability to*

recognise the value of new, external knowledge, assimilate it, and apply it to commercial ends" (p 128). They have shown that some organisations have a greater capacity to absorb and exploit knowledge than others, and that an organisation's level of prior related knowledge was positively associated with developing these capabilities. Zahra and George (2002) incorporated these ideas into a dynamic model of absorptive capacity, and distinguished between *potential* and *realised* absorptive capacities. Potential capacities relate to the acquisition and assimilation of new knowledge, whilst realised capacities refer to the transformation and exploitation of that knowledge.

2.9 Technology Acceptance

Existing Literature on software design acknowledges the importance of the user and emphasizes the importance of considering user reactions, typically in the context of predicting system acceptance and usage. Several models have been used in recent years to examine user reactions, including the Technology Acceptance Model (TAM), Social Cognitive Theory (SCT) and the Theory of Planned Behaviour (TPB).

As previously referenced, one central model used in the IT literature to examine user reactions to new systems is the Technology Acceptance Model (Davis, 1989). In this model user acceptance of a new system is based on perceived ease of use and usefulness, defined as:

Perceived ease of use refers to *"the degree to which a person believes that using a particular system would be free of effort,"* while perceived usefulness is defined as *"the degree to which a person believes that using a particular system would enhance his or her job performance."* (Davis, 1989, p. 320)

Another characteristic, 'self-efficacy' is based on extensive research by Bandura (1982) and refers to *"how well one can execute courses of action to deal with prospective situations"* and is regarded as being similar to perceived ease of use and is linked more to Social Cognitive Theory and Theory of Planned Behaviour (Compeau, Higgins and Huff, 1999) which seek to examine relationships between self-efficacy and computer use.

Interestingly, all of these models in the IT literature focus on the use of the system as the key outcome of interest. But as Fisher & Howell (2004, p 245) point out: *"Use is undoubtedly a critical outcome where IT systems are concerned, but are there other outcomes of interest, perhaps unintended outcomes?"* The point is made that focus merely on systems usage

ignores the need to examine user reactions more broadly, which includes unintended reactions and how they are formed. Very usefully, Fisher & Howell present a table of intended and unintended reactions to information technology systems (see Table 2) informed by examples of the adoption of innovations literature (Klein and Sorra, 1996) and a framework using a typology of learning outcomes developed by Kraiger, Ford and Salas (1993).

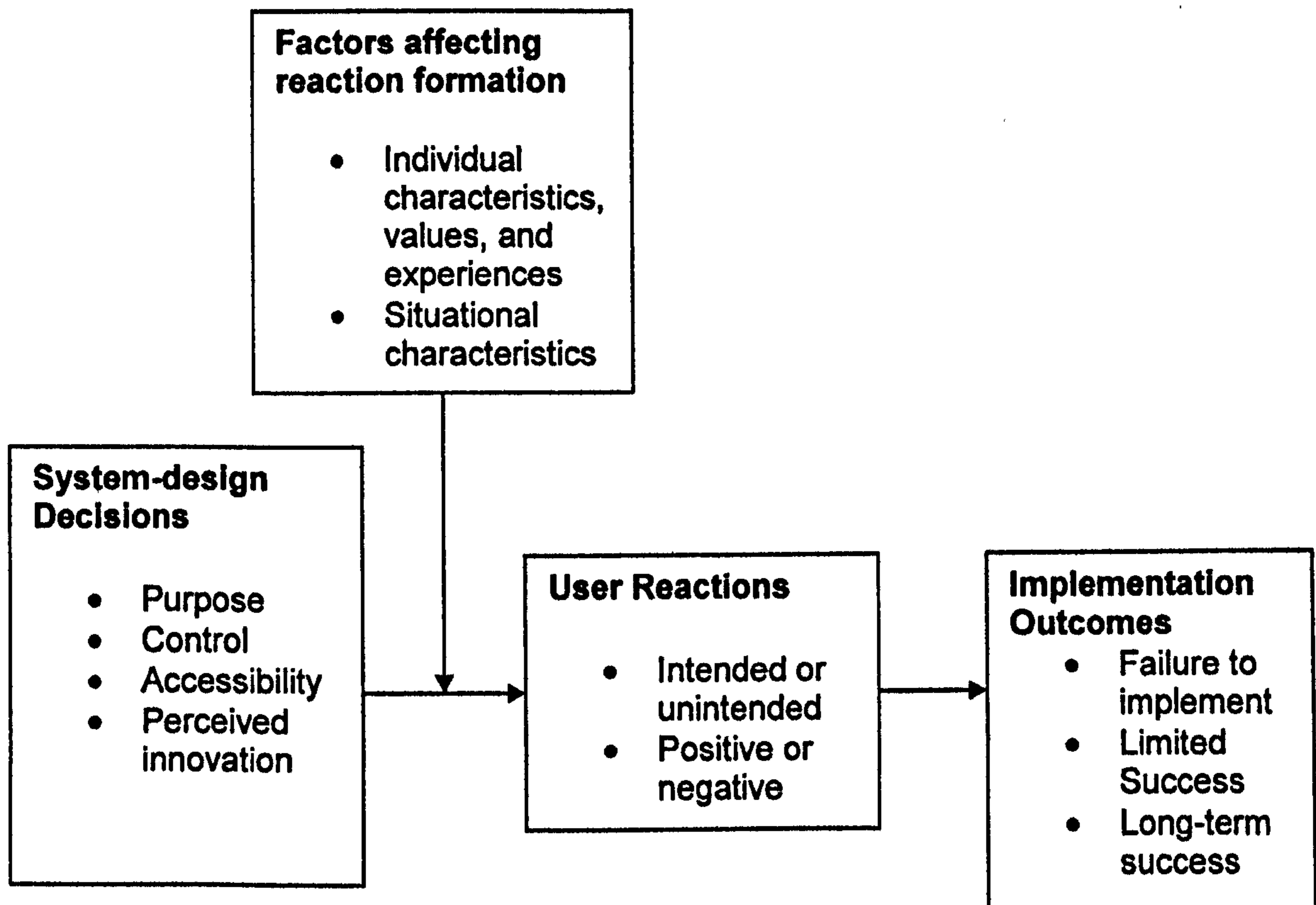
Table 2: Intended and Unintended Reactions to Information Technology Systems (Based on Fisher & Howell, 2004)

	<i>Intended reactions</i>	<i>Unintended reactions</i>
Affective Outcomes	Satisfaction Enthusiasm Attitudes about the system Self-efficacy	Dissatisfaction Cynicism Frustration
Cognitive Outcomes	Knowledge of how to use the system Perceived usefulness Perceived control	Spillover effects (positive or negative) Interpretation of corporate values and goals
Behavioural Outcomes	Use of system Increased productivity	Resistance Decreased productivity Sabotage Turnover (attrition) Knowledge sharing

Although the intended reactions column of the table represents a convenient summary of those found in much of the IT literature, arguably the real value of this table is derived from the unintended reactions column, which begins to explore some of the reactions that could occur even when the primary intended outcome, system usage, has been achieved. Fisher & Howell (p 246) also note that *“while the unintended reactions are largely negative, we believe it is possible to have positive unintended reactions that may actually facilitate implementation efforts.”*

When this proposition was combined with factors affecting IT system design decisions (Zammuto & O'Connor, 1992) and factors affecting the personal reactions of users (Isabella, 1990) a process model of employee reactions to IT system was proposed – see Figure 9.

Figure 9: Process Model of Employee Reactions to IT Systems (based on Fisher & Howell, 2004)



This model suggested several directions for future research, amongst them the need to investigate the extent to which new IT systems that require significant mental workload to learn on top of an individual's typical work duties, may create unintended reactions or exacerbate other negative interpretations.

2.10 Discussion

The literature review has highlighted that the contemporary HR function in for-profit and not-for-profit organizations faces a number of competing challenges, so creating ambiguities and tensions in what it delivers, how it delivers, how effectively it delivers, and to whom it delivers (Ulrich & Brockbank, 2005; Huselid et al, 2005; Paauwe, 2004). The drivers of HR have traditionally been described in three-fold terms (Lepak & Snell, 1998; Snell et al, 2002) as *operational* (cost effectiveness and efficiency), *relational* (improving its transactional services to increasingly demanding customers) and *transformational* (addressing the strategic objectives of the business or organization).

The tensions underlying these challenges reflect two distinctive and often divergent sets of pressures on organizations. The first set is the *external* versus *internal pulls* that exercise the minds of managers, often embedded in the distinction between operational and strategic management. The second set relates to the goals of strategic or operational activity inside an organization - whether these are principally aimed at satisfying unitary objectives, associated with the concept of shareholder value, or whether these are more plural in nature (Whittington, 2000), associated with the notion of stakeholder management and with modern forms of networked organizations.

To respond to these challenges HR management teams in a number of organizations have developed a set of interrelated, *internal* delivery and professional service strategies to meet the *external* challenges set by the business strategies of modern organizations and the longer-term branding and reputational drivers (Reilly & Tamkin, 2006). The first of these internal strategies is the re-organization of the HR function itself, combining so-called *HR transformations* (new HR delivery models based on a tri-partite model of shared services, centres of excellence and strategic or business partnering) along the lines recommended by Ulrich & Brockbank (2005) with *outsourcing* and, in some cases, *off-shoring* of key services, especially shared service centres (CIPD, 2005; Cooke, 2006; Reddington, Williamson & Withers, 2005). The second, like other business functions, is the turn to ICT, often introduced in combination with HR transformations and outsourcing to rationalize or radically change HR's internal operations (CIPD, 2005b; Gueutal & Stone & 2005; Martin, 2005; Shrivastava & Shaw, 2004).

Notwithstanding the rhetoric and groundswell of opinion among the HR community in support of e-HR, re-engineering the HR function and outsourcing, progress in the form of the more transformational benefits and pay-off in terms of cost reductions seems to have been more piecemeal and problematic (Caldwell, 2004; Reilly & Williams, 2006). This situation is also identified by a recent report from Mercer Consulting. In response to a survey of client organizations a key finding was that *“Over half the survey respondents report that they are ineffective or very ineffective at realising the expected ROI from technology investments. HR people openly acknowledge that they frequently under-use technology and therefore do not gain full benefit.”* (Theaker & Vernon, 2006)

Such evidence raises important questions about e-HR outcomes, not only resonating with the central research question but also prompting related questions, with the accent on the perception of line managers:

1. To what extent are the data and information provided by e-HR systems seen to be of value to line managers? The underlying hypothesis here is that if line managers value the additional information, other things being equal they are more likely to use it and be prepared to maintain it (*operational e-HR driver*);
2. Do line managers perceive the e-HR systems to be easy to use? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the ease of use of the system (*relational e-HR driver*);
3. Do line managers receive good HR support to help them get the best from the tools? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the level of support in the form of communications, training and general assistance (*relational e-HR driver*);
4. Does e-HR support an unfolding importance or appreciation of People Management? The underlying hypothesis here is that if e-HR helps line managers to perceive their roles to be about people management as well as their technical functions, the introduction of e-HR will achieve positive outcomes in helping managers become more effective people managers (*transformational e-HR driver*).

The following chapters describe the unfolding research design and its application to three different case organizations; its focus is primarily directed towards the discovery of e-HR outcomes but it also seeks to illuminate aspects of the literature linking *e-HR outcomes* with *HR strategy and goals*, and *e-HR architecture*, drawing on the excellent modelling work of Galliers & Newell (2003), Shrivastava & Shaw (2004), Fisher & Howell (2004) and Ruel et al. (2004).

These categories are used as a broad organizing framework within each case, as I seek to examine how e-HR outcomes are perceived by HR managers and line managers.

Chapter Three

Methodology

3.1 My Struggle through the Methodological Maze

This section explores the general arguments and principals underpinning the research design, which seeks to address the research question posed in the introduction, and repeated in the literature review. It attempts to explain the personal struggle I encountered when seeking to navigate my way through the rich seam of literature that posed all sorts of tensions and dilemmas revolving around ethics, ontological and epistemological issues.

As I wrestled with these tensions, I discovered the words of Schön (1995, p 28), who drew attention to the dilemma associated with research in professional practice:

"In the varied topography of professional practice, there is a high hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the use of research-based theory and technique. In the swampy lowlands, problems are messy and confusing and incapable of technical solution."

Clearly, in order to understand better the positioning of my research within 'the "varied topography of professional practice" I would need to question my research in a fundamental way. Mason (2002, p 14) suggests that this activity *"probably involves a great deal more intellectual effort than simply identifying a research topic."* I agree, and my reasons for saying this are set out in this chapter.

In considering the nature of the phenomena or social 'reality' at the heart of my research, it became evident that matters of ontology and epistemology, and more specifically my perspective on them, would shape my research approach. According to Marsh and Furlong (2002, p 17) ontology and epistemology *"are like a skin not a sweater: they cannot be put on and taken off whenever the researcher sees fit. A researcher needs to be able to understand his/her ontological and epistemological position and be able to defend these against critiques from other positions."*

In this regard, I found the advice offered by Mason (2002) very helpful:

“The best way to grasp that you have an ontological position, and to work out what it is and what are its implications for your research, is therefore to recognize what the alternatives are.” (Mason, 2002, p. 14)

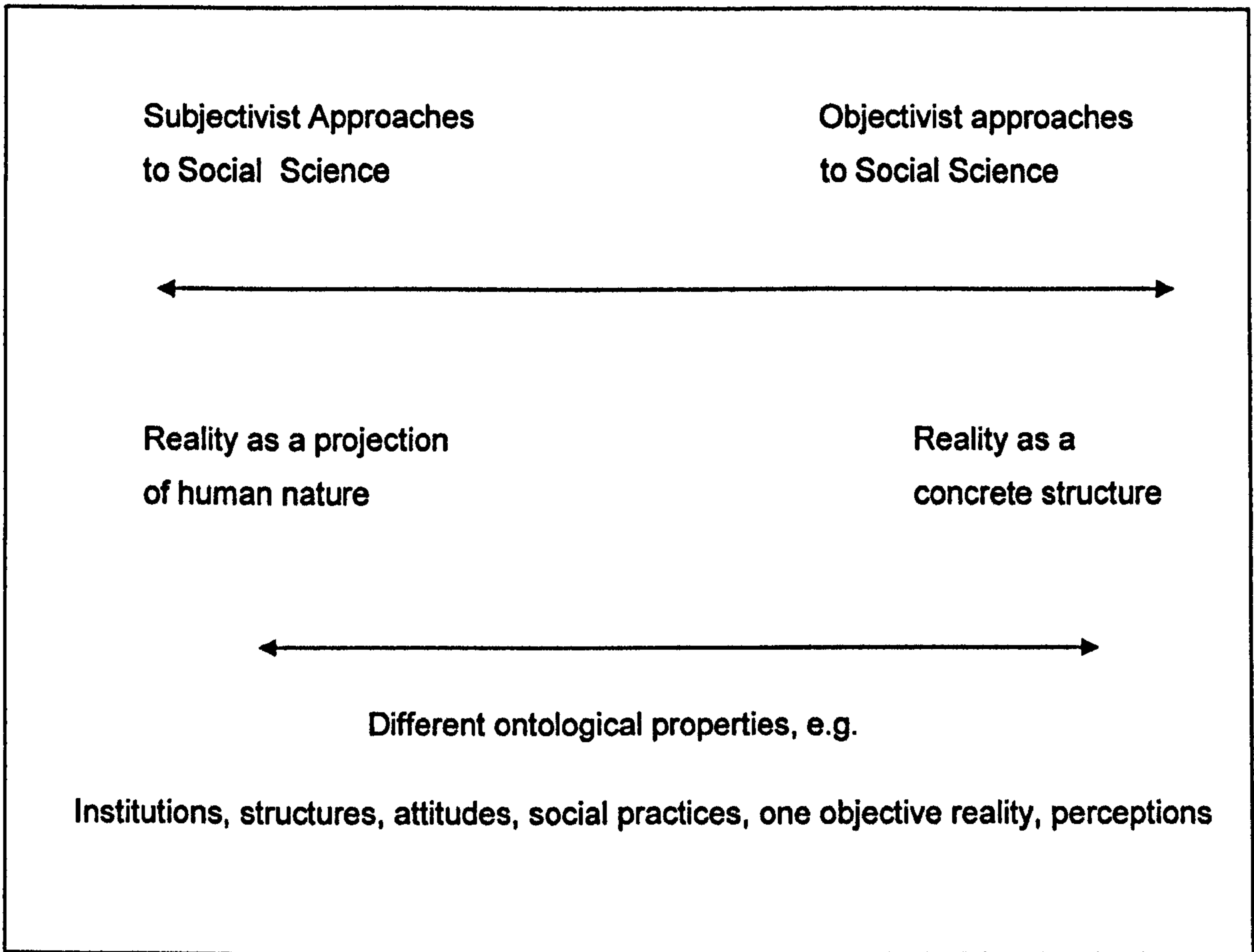
Ontological perspectives or positions precede epistemological considerations because they deal with the very nature of being – whether there is a ‘real’ world ‘out there’ that is independent of our knowledge of it, or whether it is the social construction of social phenomena (Mason, 2002; Silverman, 2001; Marsh & Stoker, 2002; Morgan & Smircich, 1980).

Unpacking this further, Mason (2002) aptly makes the point that *“Ontology can seem like a difficult concept precisely because the nature and essence of social things seem so fundamental and obvious that it can be hard to see what to conceptualize.”* (p 18)

The literature describes ontological perspectives bounded by two extreme positions or core ontological assumptions. Figure 14 based on abstractions from Mason (2002) and Morgan & Smircich (1980) illustrates these extreme positions and other positions in between.

As with the earlier work of Morgan (1997) highlighted in the literature review in Chapter Two, these positions are not intended to be used as a ‘Procrustean bed’, forcing ‘facts’ - kicking and screaming - into artificial spaces but as a way of organising ontological perspectives. Mason (2002, p 15) makes the point that *“different versions of ontology may be logically competing rather than complementary, so you cannot simply pick and choose bits of one and bits of another in an eclectic or ad hoc way, although nor do you have to take a doctrinaire approach.”*

Fig 10: Network of Basic Assumptions Characterizing the Subjective-Objective Debate within Social Science (adapted from Mason, 2002; Morgan & Smircich, 1980)



Indeed, I discovered that it can be quite difficult to grasp the idea that it is possible to have an ontological position or perspective (rather than simply to be familiar with the ontological components of the social world), since this suggests that there may be different versions of the nature and essence of social things. The process through which I examined different ontological and epistemological perspectives, and then established my stance, is now described.

3.2 An Examination of Different Ontological and Epistemological Perspectives

The assumptions about ontology highlighted in Figure 10 are intended to provide a rough typology for thinking about the various views that different social scientists hold about human beings and their world. According to Morgan & Smircich (1980) all of the views *"have a distinguished history, are the products of long discussion and debate by their advocates and their basic ideas are manifested in powerful kinds of social thought."* (p 492)

Beginning with the extreme positions on the spectrum of ontological assumptions, the assumption that posits a view of the world as a concrete structure subscribes to the notion that there is a 'real' world around us which is independent of our knowledge of it. The proponents of this world, which represents an 'essentialist' or 'foundationalist' view, argue that there are essential, inviolable differences of 'being' that provide the foundations upon which social life is built.

At the other end of the spectrum, the proponents of an 'anti-foundationalist' view emphasise the social construction of social phenomena, which refuses to recognise that a 'real' world exists, independent of the meaning which social actors attach to their actions. (Mason, 2002; Silverman, 2001; Marsh and Stoker, 2002; Morgan and Smircich, 1980; Hollis and Smith, 1990; Stanley and Wise, 1993; Denzin, 1997)

Views that exist between these extremes have *"evolved in awareness of the existence of the other points of view and indeed each [view] has to some extent developed in reaction to competing perspectives."* (Morgan & Smircich, 1980, p 492)

This implies that explanations of these mediating ontological positions attempt to incorporate insights from others and consequently any attempt to define an ontological position may be determined by the relative emphasis given to adjacent positions. It is not my major objective here to explore the relative merits and counter-arguments for the whole field of ontological debate, but rather to try to relate some of the assumptions underpinning it to the thorny problems regarding epistemological and methodological adequacy.

Taking the epistemological considerations first, these reflect the researcher's view of what we can know about the world and how we can know it; literally, an epistemology is a theory of knowledge (Mason, 2002; Silverman, 2001). Earlier, it was stated that ontology can be a difficult concept to grasp and this indeed may also apply to epistemology, although the basic concerns appear quite straightforward. There are two key questions: Can an observer identify 'real' or 'objective' relations between social phenomena? If so, how?

The first question itself subsumes two issues. From an ontological perspective, if one is an anti-foundationalist then, as previously explained, the argument is that there is not a 'real' world, which exists independently beyond a socially constructed world, to discover. At the same time, such an anti-foundationalist would also argue that no observer can be 'objective' because they live in the social world and are affected by the social constructions of 'reality'.

The second question raises another important and clearly related, issue: To the extent that it is possible to establish 'real' relationships between social phenomena (the foundationalist position), can this be done by direct observation, or are there some relationships which exist but cannot be directly observed?

The answers to these questions shapes the epistemological position of the researcher and, as in the case of ontology, a number of different ways of classifying these positions have emerged and probably the most common classification distinguishes between scientific (also called positivist) and hermeneutic (or interpretist) positions.

The scientific tradition has its traditional foundation embedded in the epistemological 'high ground' of knowledge, bounded by conditions of irrefutable testability, repeatability and objectivity. As (Morgan & Smircich, 1980, p 498) point out:

"They [positivists] are presuming that the social world lends itself to an objective form of measurement, which is revealed by examining lawful relations between elements that, for the sake of accurate definition and measurement, have to be abstracted from their context."

In methodological terms, the scientific tradition posited a very straightforward form of scientific investigation. As Hollis & Smith (1990, p 50) put it:

"To detect irregularities in nature, propose a generalisation, deduce what it implies for the next case and observe whether the prediction succeeds. If it does, no consequent action is needed; if it does not, then either discard the generalisation or amend it and [test the] fresh [predictions]."

This form of investigation embraces the use and reliance on quantitative methods to establish causal relationships between social phenomena, thus developing explanatory, and indeed predictive models, which can be applied in a universal or generalisable way.

By way of contrast, in Schön's *swampy lowlands*, abstraction of data from their context is not possible or appropriate and the often turbulent conditions are not accessible to measurement or interpretation by freezing data and objectively analysing it with approaches that assume lawful relations between elements.

As (Morgan & Smircich, 1980, p 498) observed:

"If one relaxes the ontological perspective that the world is a concrete structure, and admits that human beings, far from merely responding to the social world may actively contribute to its creation, then the quantitative methods become increasingly inappropriate."

This is an expression of the 'anti-foundationalist' ontological view which emphasises the social construction of social phenomena. Correspondingly, the epistemology connected with this ontological perspective appeals to the interpretist tradition, which is to contend that the world is socially or discursively constructed. This means that for researchers working within this tradition, social phenomena do not exist independently of our interpretation of them; rather it is this interpretation of social phenomena which affects outcomes.

This position has clear methodological implications. It argues that there is no objective truth, that the world is socially constructed and that the role of the researcher is to study those social constructions. The methods and techniques used to do this embrace and rely on qualitative approaches, such as interviews, focus groups and so on, to help establish how people understand their world.

Both of the ontological positions outlined, and the epistemological and methodological implications associated with them, are susceptible to criticism.

The criticism of positivism takes broadly two forms: The first line of criticism concerns the potential for positivists to misinterpret how science really proceeds. Two lines of argument have been particularly important in this regard. First, there are the pragmatist positions of Quine (1961) and Kuhn (1970), cited in Marsh and Furlong (2002), who develop two crucial critiques of positivism:

1. That any knowledge we derive from the five senses is mediated by the concepts we use to analyse it, so there is no way of classifying, or even describing, experience without interpreting it.

2. This it turn may affect the objectivity of the exercise and as such the conclusions drawn from the 'facts' may be inaccurate.

The second line of criticism argues that there are obvious differences between social and physical phenomena that make social 'science' difficult if not impossible. Morgan & Smircich (1980, p 498) make this point:

"If it is recognised that the social world constitutes some form of open-ended process, then any method that encloses the subject within the confines of a laboratory, or merely contents itself with the production of narrow empirical snapshots of isolated phenomena at fixed points in time, does not do complete justice to the nature of the subject."

To those researchers in the interpretist tradition, the above arguments underpin the need to adopt a different view of social inquiry, which rejects the notions of 'objective' analysis and that the world exists independently of our knowledge of it. However, this alternative view also attracts criticism. The major criticism of the interpretist position comes, not surprisingly, from positivists. To positivists, the interpretist tradition merely offers opinions or subjective judgements about the world. As such, there is no basis on which to judge the validity of their knowledge claims. One person's view of the world is as good as another's view.

But these apparent deficiencies are defended by those researchers who argue that uncertainties are the essence of research, not the feature that robs it of validity (Britzman, 1995; Packwood & Sikes 1996; Scheurich, 1996; Alvesson and Sköldberg, 2000). In fact, they suggest that we need to reconstruct our very concept of validity in relation to research, seeking 'new imaginaries' (Scheurich, 1996, p 53) that take us beyond the established ways of seeing, interpreting and justifying our research activities.

One of the difficulties of this position is that it can be described as anti-methodological or "anything goes" (Alvesson and Sköldberg 2000, p 184). Further, *"researchers in this tradition do not usually aim or claim to capture the truth or reality but to offer an interpretation or version which is inevitably partial"* (Wetherill et al. 2001, p 11).

These debates highlight a crucial issue, identified by Morrow (1994) who observed that *'the predominant distinction between quantitative and qualitative methods [derived from different epistemological traditions]...serves primarily to conceal and confuse theoretical positions. This distinction focuses our attention to the techniques through which social life is*

represented in the course of research, as opposed to the process of representing reality' (Morrow, 1994, p 207).

And this issue clearly connects with the considerations surrounding my attempts to locate my research within the 'varied topography of professional practice'. Indeed, having reviewed the ontological perspectives, as suggested by Mason (2002) this allows a more informed approach to determining my epistemological stance in relation to my research questions set out in the previous chapter.

I concluded that my attempts to 'make sense' of those questions would focus on understanding the outcomes liberated from the social entities subjected to research, rather than attempting a full causal explanation of the outcomes or to use them as a powerful predictor of outcomes in other social entities beyond the scope of the research.

I reached this view because having surveyed the literature and reflected on my own work experience, I was persuaded that the complexity and the dynamic nature of the social world means the researcher can seldom make confident predictions about it, or reveal incontestable findings. There are simply too many factors operating in any situation and the relationships which operated in the past will not necessarily be those that prevail in the future. As a result, I became more convinced that my research aim lay in the need to reveal understanding [of the identified social entities under investigation] rather than to seek or claim a precise causal explanation.

This requires an acknowledgement that no neutral, single truth is possible in the social sciences because these involve the study of other people who have their own viewpoints. Any account of a social phenomena or situation inevitably reflects the researcher's partial understanding and special interest. As such, the epistemological claims being made are that the knowledge obtained is partial, situated (specific to particular situations and periods rather than universally applicable) and relative (related to the researcher's world view and value system).

The methodological implications of this stance are covered in more detail in the following sections of this chapter. However, as a generally stated position, when faced with the myriad of approaches available in support of my epistemological stance, I found comfort with the words of Hammersley (1992, p 163), who cautioned against the absurdity of pushing too far on the positivist/interpretist distinction:

"We are not faced, then, with a stark choice between words and numbers, or even between precise and imprecise data; but rather with a range from more to less precise data. Furthermore, our decisions about what level of precision is appropriate in relation to any particular claim should depend on the nature of what we are trying to describe, on the likely accuracy of our descriptions, on our purposes, and on the resources available to us; not on ideological commitment to one methodological paradigm or another."

This stance allows the collection and interpretation of both qualitative and quantitative data, with the intention of using both types in a way that seeks to enrich the quality of the other. This position informs and influences my approach to the longitudinal research process set out in the following chapters.

Finally, it is perhaps worth mentioning the words of Mellor (1998, p 459), who points out that the uncertainty surrounding research activity is worthy of study in itself. Referring to Schön's (1995) 'swampy lowland' of research and practice, he admitted: *"I eventually came to accept that my struggle in the swamp was the methodological path to find a better method."* This resonates with the earlier views of Mason (ibid), with which I agree, who warned that the intellectual effort required in establishing a methodological perspective, exceeds simply identifying a research topic.

3.3 Methodological Implications – the Case Study

This section sets out the broad arguments that underpin the methodological approach to the research. Based on my ontological and epistemological perspectives described in section 3.2, I recognised the need to achieve a connectedness with my research design in respect of generating and analysing data and in the construction of my claims about the social entities under consideration.

I was eventually drawn to the concept of conducting case study research, which appealed to my ontological and epistemological perspective because the quintessential characteristic of case studies is that they strive towards a holistic understanding of cultural systems of action. Cultural systems of action refer to sets of interrelated activities engaged in by the actors in a social situation (Zonabend, 1992) and this seemed to have natural application to my own research setting. My actors were HR and Line managers, and the interaction occurred either directly through the use of e-HR applications, or in some way mediated by them, within the social context of their respective organisations.

However, before settling on this approach, I was cognisant of the variety of arguments circulating around the case study concept, which question or certainly qualify its appropriateness and validity in research design.

For example, Abercrombie, Hill & Turner (1984, p 34) state that because a case study represents *“the detailed examination of a single example of a class phenomena, a case study cannot provide reliable information about the broader class, but it may be useful in the preliminary stages of an investigation since it provides hypotheses, which may be tested systematically with a larger number of cases.”*

This description is indicative of the conventional wisdom of case study research which argues that a case and a case study cannot be of value in and of themselves; they need to be linked to hypotheses. Another expressed concern about case study research is that the method maintains a bias towards verification, understood as a tendency to confirm the researcher's preconceived notions so that the study therefore becomes of doubtful scientific value.

The bias towards verification in general exposes an alleged deficiency of the case study and other qualitative methods, in that they ostensibly allow more room for the researcher's subjective and arbitrary judgement than other methods. However, Ragin (1992), Mason (2002), Yin (1983, 1989, 1993, 1994) and others dispute this allegation and argue that the critique is fallacious, because the case study has its own rigour, different but no less strict than the rigour of quantitative methods. They argue that the advantage of the case study is that it can 'close in' on real life situations and test views directly in relation to phenomena as they unfold in practice.

Ragin (1992, p 125), called this a *“special feature of small-N research”* and went on further to explain that criticising single-case studies for being inferior to larger, multiple scale studies is misguided because even single-case studies *“are multiple in most research efforts because ideas and evidence may be linked in many different ways”*.

Moreover, the question of subjectivism and bias toward verification applies to all methods, not just case study and other methods. For example, the element of arbitrary subjectivism will be significant in the choice of categories and variables for a quantitative or structural investigation, such as a structured questionnaire to be used across a large sample of cases. And the probability is high that (a) this subjectivism survives without being thoroughly

corrected during the study and (b) it may affect the results quite simply because the quantitative/structural researcher does not get as close to those under study as does the case study researcher and, therefore, is less likely to be corrected by the study objects "talking back". According to Ragin (1992, p 225):

"This feature explains why small-N qualitative research is most often at the forefront of theoretical development. When N's are large, there are few opportunities for revising a casing [that is, the delimitation of a case]. At the start of the analysis, cases are decomposed into variables and almost the entire dialogue of ideas and evidence occurs through variables."

From this point of view, the proximity to reality which the case study entails, and the learning process it generates for the researcher, will often constitute a prerequisite for advanced understanding.

Having assessed the arguments, I was persuaded that the application of a case study approach to my research situation was entirely reasonable and appropriate. It was evident the approach would embrace both quantitative and qualitative methods, in line with my ontological and epistemological stance, and a substantial body of material in the literature supports the view that case study approaches represent a method of learning about a complex instance through description and contextual analysis, aptly described by Yin (1989, p 82) who states that case studies allow a researcher to *"reveal the multiplicity of factors [which] have interacted to produce the unique character of the entity that is the subject of study."*

This appealed to the nature of my research questions, which were seeking to reveal a better understanding of a range of outcomes related to the use of e-HR in specific organisations.

3.3.1 The Disciplines of Case Study

The previous section drew attention to some concerns about the validity of case study research, which appear to hinge on its flexible and adaptive nature and perceived imprecision in dealing with a research situation. Authors such as Merriam (1998), argue that it is often misused as a 'catch all' research category for anything that is not a survey or experiment.

In response to these concerns, a broad body of literature (for examples, see Yin, 1983, 1989, 1994; Feagin, Orum & Sjoberg, 1991; Flyvberg, 2006) has addressed issues of rigour

and relevance by setting out disciplines or protocols that are designed to bolster the quality of case study research. Indeed, Flyvberg (2006, p 223) makes the important point that “*the value of the case study will depend on the validity claims that researchers can place on their studies and the status these claims obtain in dialogue with other validity claims in the discourse to which the study is a contribution.*”

These validity claims will inevitably be influenced by the conduct of the case study in areas such as data collection, analysis and presentation of results, and these aspects receive close attention. For example, Yin (1994) argues that the case study research protocol is a major component in asserting the reliability of the research and suggests that a typical protocol should have the following sections:

- An overview of the case study project (objectives, issues, topics being investigated)
- Field procedures (credentials and access to sites, sources of information)
- Case study questions (specific questions that the investigator must keep in mind during data collection)
- A guide for the case study report (outline, format for the narrative) (Yin, 1994, p. 64).

The overview should communicate to the reader the general topic of inquiry and the purpose of the case study. The field procedures mostly involve data collection issues; Yin (1994) argues that most of the field methods described in the literature treat data collection in isolation from the other aspects of the research process, and that this is inappropriate and unproductive in case study research. Multiple sources of data, such as survey instruments, interviews, and documents are allowed, indeed encouraged, and provide a ‘multi-perspectival’ view that can be used to enhance the validity of the research. This is often connected with attempts to demonstrate triangulation (see Feagin et al., 1991; Denzin, 1984) where different types of data are used to show evidence of convergence towards understanding the research topic.

Developing this line of enquiry further, Denzin (1997) identified four types of triangulation: *Data source triangulation*, when the researcher looks for the data to remain the same in different contexts; *Investigator triangulation*, when several investigators examine the same phenomenon; *Theory triangulation*, when investigators with different view points interpret the same results; and *Methodological triangulation*, when one approach is followed by another, to increase confidence in the interpretation.

There are elements of both data triangulation and methodological triangulation in my research situation, where I use different methods of data capture and analysis, and different types of data, in an attempt to improve the quality of understanding of the research situation (see section 3.4).

However, other authors (Hammersley & Atkinson, 1983; Bloor, 1978; Fielding & Fielding, 1986) caution against over-reliance on triangulation to create a more authentic representation of the social entity under study. As Hammersley & Atkinson (1983, p.199) point out: *“one should not adopt a naively ‘optimistic’ view that the aggregation of data from different sources will unproblematically add up to produce a more complete picture.”*

My stance on this issue is that the cautionary observation from Hammersley and Atkinson does not imply that the qualitative researcher should avoid generating data in multiple ways. The ‘mistake’, it appears to me, only arises in using data to adjudicate between accounts, which ignores the context-bound nature of the data source. This position is perhaps summed up more elegantly by Fielding & Fielding, (1986, p 35), who argue that *“Multiple theories and multiple methods are worth pursuing”* and that *“The accuracy for a method comes from its systematic application, but rarely does the inaccuracy of one approach to the data compliment the accuracies of another.”*

The attention to ‘systematic application’ speaks to the discipline of ‘research protocol’ discussed earlier, highlighting the need to show plausible linkages between the research questions, the data, its interpretation and the presentation of the findings.

Another aspect of protocol is in the use of ‘guidelines’. These can take various forms – ethical, procedural and so on – and some observers would argue that if guidelines lead to an overly prescriptive or instrumental approach to qualitative research then it may have a negative impact. These matters are addressed, for example, by Reid and Gough (2000, p 84), in the context of doing educational research:

“Judging the quality of qualitative research reports requires the recognition of two issues regularly contested within the literature on guidelines. Firstly, the wide variety of types, genres and forms of qualitative research; and secondly, the proposition that the criteria for judging research quality contain within them, implicitly or explicitly, a defining view of what research is, and perhaps more contentiously, should be.”

The first issue grapples with the argument that guidelines are prescriptive and miss the point of qualitative research - that is the depth, richness and uniqueness of the methodology. The

second issue raised by Reid and Gough is that applying guidelines potentially has a 'policing function' that identifies good research from bad.

It is certainly my view that for the purpose of my research, guidelines should not interfere with or unduly prejudice the outcomes but provide a framework that leads to a greater depth of inquiry, adapting to changing circumstances in the research situation. As such, my use of guidelines in research is embraced with that intention.

As an example, Bournemouth University's Ethics policy (2004) has very clear guidelines on the responsibility of the researcher towards participants. Section 1.4a provides the following direction:

"In all circumstances, researchers must consider the ethical implications of their research and the physiological, psychological, social, political and economic consequences of it for the participants. Every effort must be made to assure the protection of Research participants against physical, mental, emotional or social injury. No harm must come to them as a result of being involved in the study."

Rather than viewing this as a crippling piece of 'policing legislation', I interpreted the spirit of this as encouragement to uphold the highest standards of professionalism when conducting the work. Indeed, Gough and Reid (2000, p 55) conclude that *"there seems to be no reason why guidelines should not be used in qualitative research to ensure the quality of work, without becoming weapons on a methodological battlefield."* I agree with that sentiment.

The essential elements of the methods used for the individual cases are presented in the following sections. Particular nuances considered to be of relevance to the treatment of a case can be found in the chapter dealing with that specific case.

3.4 Case 1 - Cable & Wireless

The aim of this phase of the research was to capture the perceptions of e-HR outcomes by HR and line managers affected by the impending implementation process. I have set out the arguments that formed the basis of my decision to pursue a case study approach embracing both quantitative and qualitative techniques. I was also aware that the research would give me an opportunity to challenge various ways of thinking involved in the institutional change process surrounding e-HR at Cable & Wireless, potentially creating a 'dissonance' needed

to trigger the re-thinking of ideas in the light of alternative, possibly contesting viewpoints or ways of thinking (Cassel & Giddens, 1993; Corcoran, Walker & Wals, 2004). Indeed, Corcoran et al (2004, p 15) argue strongly that: *"Dissonance and reframing should be both a part of the process of doing case study research and a resulting outcome of the research when it is read by others."*

Further, it is suggested that key questions relating to case study research are best addressed by a community of learners representing a variety of perspectives of the issue at stake in a cyclical process of simultaneous action and reflection during which a synergy between theory and practice is constantly sought – a process often referred to as 'action research'. (Ellis & Kiely, 2000; Greenwood & Levin, 1998; Carr and Kemmis, 1986; Kember, 2000)

Taking account of these considerations, I was minded initially to adopt an action research approach because it *"promotes broad participation in the research process and supports action leading to a more just or satisfying situation for the stakeholders"*. (Greenwood & Levin, 1998, p 4)

More specifically, Carr and Kemmis (1986) state that three conditions are individually necessary and jointly sufficient for action research to be said to exist:

1. A project takes as its subject matter a social practice regarded as a form of strategic action susceptible to improvement.
2. The project proceeds through a spiral of cycles of planning, acting, observing and reflecting.
3. The project involves those responsible for the practice in each of the moments of the activity.

In the context of this initial research, the 'social practice' embraced the daily interactions between the e-HR Transformation Programme team and the managers in different parts of the business. The situation was 'susceptible to improvement' in respect of the research revealing useful insights into the impact of e-HR on organisational practices. These insights would provide signposts for improvement in the sense of how managers perceive the phenomenon of e-HR, and recommend actions to allow e-HR to deliver more benefit.

At the time, it was also my intention to undertake a 'spiral of cycles of planning, acting, observing and reflecting' within the same social practice. With regard to the research

involving 'those responsible for the social practice in each of the moments of the activity', I originated the research direction, accepting appropriate steering and guidance from my academic supervisors. The research method was designed to involve the HR managers and line managers susceptible to the change process and the new practices.¹

As a senior manager at Cable & Wireless, I was conscious of the potential for researcher bias or "experimenter effects" that may result from the data collection process (Weiss, 1994, p 211). This led to asking some searching questions about whether participation by informants was really voluntary and what distortions might occur if I was seen to be the person actively conducting the data collection and subsequent analysis. While my management style was open and I actively encouraged my team members and other stakeholders involved in the e-HR Transformation programme to challenge my decisions if they thought they were wrong, I remained concerned that informants would answer questions with what they thought I wanted to hear rather than their true opinion or feelings about a given subject area (Yin, 1994).

Consequently, my response to the concerns about 'researcher bias' and its potential contamination of the research findings, allied with a need to demonstrate a high level of confidentiality, protecting the identity of the participants, was to use an external consultant to carry out the data collection and initial analysis.

The consultant used a process called 'Stakeholder Dialogue'. This process had been used in an earlier, separate, research exercise for Cable & Wireless and I had received positive feedback from its internal sponsor.

This protocol was considered to operate ethically. The Bournemouth Research Ethics Policy and Procedures (2004, p 6) makes specific provision for the use of consultants, "*which involves the development of existing knowledge and the application of analytical and investigative skills to the resolution of problems presented by a client, usually in an industrial, commercial or professional context,*" provided the researcher's 'responsibility to participants' described earlier is upheld. These, and associated guidance and practices were adhered to throughout.

¹ The intention to conduct action research within Cable & Wireless was subsequently curtailed as a result of my leaving the organisation after the first piece of research has been undertaken. This matter receives more attention in Chapter Four.

The research also conformed to other guidelines surrounding case study research, designed to enhance the credibility of the findings (Hamel et al., 1993; Stake, 1995; and Yin (1984, 1994) concerning the need to maintain a chain of evidence and a case study data base.

However, I was also aware that the use of an external consultant would arguably diminish the claim [for action research] that 'all those responsible for the social practice should be involved in each moment of activity'; the act of using an intermediary would serve to distance me (a member of the social practice) from data capture and analysis. However, on balance, I determined that the perceived benefit of capturing information 'uncontaminated' by my role as researcher, with the attendant benefit of defence from potential claims of researcher bias, warranted the action to engage an external consultant.

Proceeding on that basis, I embarked upon my initial research, to build a picture of the perception of e-HR outcomes by HR and line managers in Cable & Wireless.

Following the use of Stakeholder Dialogue, I attempted to conduct a more detailed analysis of the captured data, using an analysis tool called Enquire Within™.

The main underpinnings of each approach are presented in sections 3.4.1 and 3.4.2.

3.4.1 The Process of 'Stakeholder Dialogue'

The process of Stakeholder Dialogue involved the following steps:

1. Discussion of the proposed research with the consultant and formulation of brief;
2. Data capture; Initial e-mail correspondence, followed up by interviews conducted face-to-face or by telephone with the participants, if they agreed to do so.
3. Data analysis; qualitative information analysed for main themes and issues by visual inspection.
4. Report from the consultant to me; main themes and issues collated as a short report.
5. Feedback to research participants; report as above *plus* my response to the findings.

Confidentiality was ensured throughout the process; no participant identities would be revealed and no participant data would be made available for inspection by me or any other party, unless the participant(s) gave express approval.

Steps 1) and 2) are explained in more detail below. Steps 3) thru 5) are covered in Chapter Four.

Step 1 – Formulation of the Brief

For pragmatic reasons, the initial research had to be manageable within the time scales allocated by the DBA process, and sought to provide a balance between depth and breadth. As mentioned previously, the main guiding factor supporting the choice of an independent research assistant was the desire to preserve confidentiality, integrity and objectivity around the process of data capture and subsequent interpretation.

At this point, acting to guide the data collection and analysis, I discussed the e-HR programme at some length with the consultant and imparted a sense of what I wanted the research to achieve; namely that I needed to gain meaningful insights and understandings into the way HR and line managers currently viewed the potential outcomes of the e-HR programme. I explained the research principles and the intention to use the research findings to improve the implementation of e-HR in the UK.

A number of research questions were constructed, designed to elicit meaningful insights into the managers' perceptions of e-HR. These questions, set out below, were informed from my knowledge of the literature at that time, together with my personal experience gained from actually running the programme. The depiction by Lepak & Snell (1998) of the potential operational, relational and transformational characteristics of e-HR provided a basis for exploring the central research question. However, it is worth noting that I did not attempt at this stage to address explicitly the related questions set out in the Introduction and Literature Review because I judged that these would be more appropriate to a research situation where e-HR had already been implemented. As such, cognisant of the informing literature and the envisaged role that HR and line managers would play in the impending e-HR implementation process, I set out a range of questions that would allow the participants full opportunity to respond descriptively:

1. Given your current understanding of e-HR, how do you think this will affect your day-to-day work?
2. If e-HR means operating more standardised processes, what do you see as the advantages?
3. What are the disadvantages?
4. How do you feel about your role in enabling effective implementation of e-HR?

5. What concerns/questions do you have about how e-HR will impact?

The primary method of data capture – e-mail – would address concerns expressed by Seale (1999, p 148) about the possible introduction of researcher bias:

“Recording observations in terms that are concrete as possible including verbatim accounts of what people say for example, rather than researchers constructions of the general sense of what a person has said, which would allow researchers personal perspectives to influence the reporting.”

The responses by e-mail would be ‘concrete, verbatim accounts’, thereby minimising contamination by researcher bias.

Step 2 - Collecting the Data

The next stage of the process involved an e-mail to the participant group. Participants were selected using a purposive sampling technique, meaning that the participants were purposely chosen because of their relevance to the research. The HR and line management populations were at the forefront of the implementation of e-HR and therefore represented a significant population from the perspective of this investigation.

The sample comprised 12 HR managers designated as having significant roles in the implementation phase of e-HR. In turn, the HR managers agreed to include their customers - a total of 60 line managers – in the research. The 12 HR managers and 60 line managers constituted the ‘target group’ or participant population for the research.

Saunders et. al., (2006) provides justification for the use of this sampling technique, commenting that purposive sampling is often used when working with small samples, which was the strategy adopted here. Patton (2002) also emphasises the appropriateness of this form of sample in enabling the researcher to select information-rich cases, therefore providing the opportunity to expand on the findings generated from the captured data.

Before the questions were sent out to the participant group, they were pilot tested with a small number of HR managers, to see if they felt any changes were necessary. No suggestions were forthcoming.

I conveyed the contact details of the HR managers, with their permission, to the independent consultant. In parallel, the 12 participating HR managers notified their respective line managers, informing them of the purpose of the research and stressing the independent and confidential status of the exercise.

This was followed up within a couple of days by the consultant, who e-mailed the research questions to the entire target group. The mail also reinforced the Stakeholder Dialogue process, as a means of enabling the e-HR project team to hear and manage in advance the real concerns and issues about the implementation of e-HR in the UK, and to deal effectively with those issues at an early stage.

The participants were given two weeks to respond to the research questions. At the conclusion of the data capture exercise, eight responses were received from HR managers – a response rate of approximately 67% - and four responses from the line manager population – a response rate of approximately 7%. The significance of these responses and the subsequent analysis is presented in Chapter Four.

As explained earlier, the confidentiality surrounding the Stakeholder Dialogue process did not allow for any primary data to be seen by me, as the client, without express permission by the participants. This was not forthcoming and I used another process called Enquire Within™ (see section 3.4.2) to conduct further examination of the data.

3.4.2 Enquire Within™

Enquire Within™ (EW) is a computer software program that facilitates construction and analysis of repertory grids. The Repertory Grid Technique (RGT), grounded in the theory of Personal Construct Psychology (PCT), was first propounded by George A. Kelly in the 1930's and written about extensively throughout his career (1955/1963). Kelly developed the technique during the 1950's as a diagnostic tool for using PCT in the practice of psychology. Later, in the 1960's, applications for RGT started to be found in areas such as market research and training. In terms of its use in management research, RGT allows the researcher to get a 'mental map' of a research situation.

Easterby-Smith et al. (1996) point out that if people's actions are determined largely by how they understand situations then the grid provides an excellent means of uncovering and representing that understanding. This seemed to be a good fit for my research situation,

where I was seeking to achieve a re-interpretation of the data captured via the Stakeholder Dialogue process, free from any bias on my part.

I selected EW in the knowledge that the adoption of computer-based software for enhancing data analysis should be a carefully considered decision that supports the quality and relevance of the research (Silverman, 1999; Silverman, 2001; Mason, 2002). The claims for RGT supported its appropriateness for addressing the concerns of my research situation by contributing to a 'multi-perspectival' analysis.

In discussing business applications of RGT, Stewart (2000) makes the point that it is important to have an understanding of a clear, overriding or 'superordinate' purpose of applying the grid. In my research situation, I set out my superordinate purpose as:

"To gain further critical insights into the earlier findings of the 'Stakeholder Dialogue' process concerning the e-HR programme at Cable & Wireless."

Interview Process

The EW software bundle came in the form of two floppy discs which loaded onto my computer without incident. There were numerous health warnings that came with the overall package; most of these emphasised the importance of studying in detail the information documents supplied and also any associated tutorial materials, as it was imperative to read, inwardly digest and understand these before embarking on an interview process either with oneself or with another party.

I spent several days attempting to become sufficiently familiar with the software to allow me to conduct a reasonable interview. At this stage, I had read and assimilated to the best of my ability the information contained in the literature and supporting guidance. I had followed the process described in the literature for interviewing oneself on a number of (familiar) topics - choosing one's ideal car, for example – in order to build a sense of understanding and familiarity with the software programme.

As previously stated, the purpose of my using EW was to interview the consultant who had captured the original data, with a view to enhancing the first pass analysis from the Stakeholder Dialogue process. The data generated from the use of EW and the resulting 'dendritic analysis' are presented in Chapter Four.

3.4.3 Reflections

The lessons learned during the research at Cable & Wireless, which included an enforced distancing from the data (see Chapter Four for a more detailed analysis) led me to reassess my research approach for future cases. This reflected my personal immersion in Schön's (1995) "swampy lowlands" of the "varied topography of professional practice" and my search for a better method.

3.5 Case Two – Schlumberger

The aim of this phase of the research was to build upon the initial research phase at CWG in order to examine the perceptions of e-HR outcomes by HR and line managers at Schlumberger, an organization which had a mature range of e-HR tools.

I reflected on ways to revise my research architecture in an attempt to create a faithful representation of my new research situation (Schwandt, 2001; Silverman, 2001). I was clearly mindful of the need to have direct access to the data. I also wanted to increase the sample size of research participants or informants, particularly in respect of line managers. As mentioned previously in Chapter One, my research was attempting to address the "noticeable absence of empirical research on e-HR" identified by Kettley & Reilly (2003) and the dangers of diminishing or omitting line managers from this kind of work identified in the CIPD Report (2002).

As I pondered the most appropriate approach, I remembered the views of Hammersley (1992), who cautioned against the "absurdity of pushing too far on the qualitative/quantitative distinction." Drawing on the literature discussed in section 3.3 surrounding case study research, and my initial research experience, I determined that I would proceed on the basis of a blend of qualitative and quantitative approaches, and to attempt to apply these 'on their own merits' such that the multiple strands of data and their analyses would lead to useful and defensible insights into my research situation.

My response to these considerations was to design a two-stage approach. The first stage consisted of a web-based survey to provide an initial topography of perception towards a range of statements designed to probe e-HR outcomes. The second stage comprised follow-up interviews with survey participants to provide richer insights into the survey responses. A detailed description of each stage appears in sections 3.5.1 and 3.5.2.

Respondents were selected using a purposive sampling technique, meaning that the participants were purposely chosen because of their relevance to the research. Saunders et. al. (2006) provides justification for the use of this sampling technique, commenting that purposive sampling is often used when working with very small samples such as in case study research, which was the strategy adopted here. The sample in this research consisted of line managers who had direct reports and significant people management responsibilities. Each participant had completed the web-based survey and confirmed his or her willingness to be chosen for subsequent follow up research aimed at obtaining more detailed insights into their views of the e-HR system. By selecting the sample in this way, not only was it established that respondents were willing to participate in the research, but it was hoped that they would have a valuable contribution to make in terms of addressing the central and associated research questions.

3.5.1 Web-Based Survey

All interactions with the research participants were conducted within a multi-stage, contact protocol. Contacts were sequenced as follows:

- The Personnel function sent out an e-mail to their line manager communities, advising that they had commissioned me to conduct a survey to quantify line managers' views regarding Schlumberger's e-HR tools, known internally as 'slb.people'. The reasons given were to identify areas for improvement/enhancement that would inform next-step projects and accordingly investment. Participants were advised that a follow up mail would be sent out from me, the researcher, in the coming days, officially to open the survey and to give instructions on how to take part.
- I contacted all research participants by personalised e-mail. This reiterated the main objectives of the research and advised participants how to access the survey tool and complete the survey. The participants were urged to take part and advised that the operational window for the survey was 14 days.
- A personalised e-mail reminder after 7 days.
- A personalised e-mail conveying a final request for participation

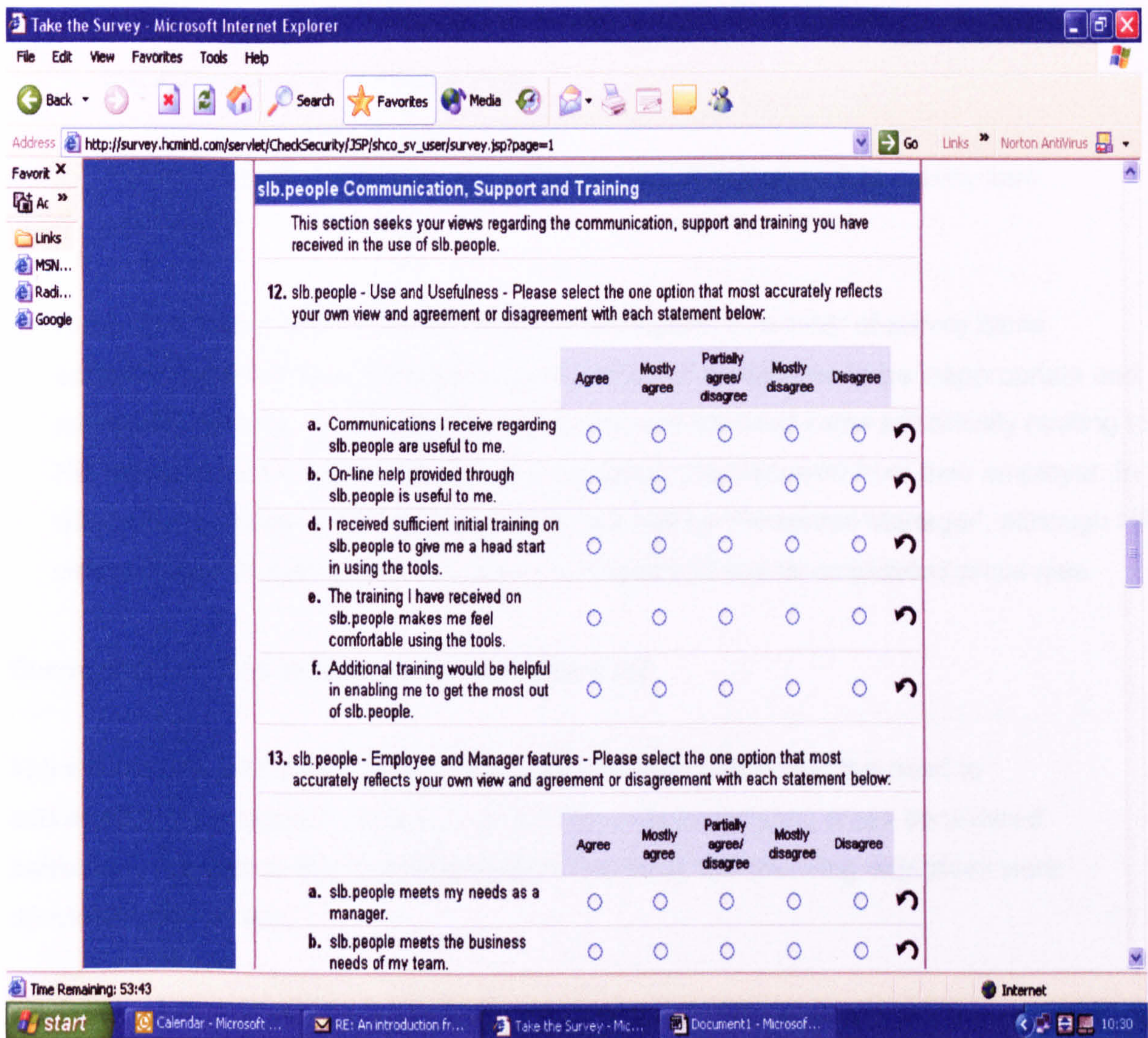
This multi-faceted contact strategy incorporated features that have been linked with high response rates in previous studies seeking to assess perception of ICT related phenomena (e.g. Dillman, 2000)

A web-based survey tool containing interrelated pages written in HyperText Markup Language (HTML) served as a data repository. This was hosted and configured by HCM International, a company headquartered in Seattle, USA and with a London based office. I had worked directly with its Chief Executive during my time at Cable & Wireless and he very kindly offered me the opportunity to use his web-based survey tool for the research at Schlumberger.

The welcome and instruction pages addressed matters regarding informed consent, including assurances of confidentiality of responses, and gave time estimates to answer the survey, together with contact information for the researcher.

Several measures were implemented to promote efficient navigation of the web pages. Differing visual guides were used throughout to distinguish instructions, sections, questions and response options. From a formatting standpoint, scroll down pages with multiple items were chosen over single-item screens; the latter can inflate the time taken to complete the survey as each item is submitted to the server (see Dillman, 2000). Default values for pull-down menus were programmed as "Please select" to avoid the possibility of receiving responses that did not constitute a designation from the respondent. A similar logic was followed in programming default values for radio buttons, as suggested by Birnbaum (2001). Also, participants were required to provide a definitive response to each item – no default values were assumed. This treatment was consistent with the Couper et al (2001) recommendation that in academic research a situation should be avoided where, for example, a "no answer" response cannot be distinguished from a "default response". Respondents could also access a 'free text response' section at the end of the survey, in which they could register their views descriptively. An example of a survey page is shown in Figure 11.

Figure 11: Example Screen Shot of Survey Tool



Development of the Survey Item Pool

The development of the survey item pool followed a multi-stage process:

- An initial meeting between me and the Schlumberger HR Director to discuss the research purpose and its application. This led to the generation of survey objectives. (See Chapter Five for further details on how this meeting and associated events unfolding at the time, influenced the research setting).
- Conversion of objectives into a draft item pool by me

- Configuration of the web-based survey tool (by HCM International)
- Beta test with the Schlumberger HR team to test the functionality of the web-based tool and review the draft item pool
- Survey item pool approved – see 'conversion of objectives into survey item pool' below

Note: In the beta test phase amongst HR Managers, a number of survey items concerning the HR function were either modified or considered to be inappropriate and eventually removed. Examples that were removed included items specifically relating to HR managers and their perception of the support they received from their employer. In other cases, the term 'HR manager' was replaced by 'Personnel Manager', although HR was still used to refer to the function or business unit and its associated processes.

Conversion of Objectives into Survey Item Pool

The discussions with the HR Director at Schlumberger concerned the need to address the main research question, whilst also accommodating areas considered particularly relevant to the host organisation. As such, the following objectives were developed and agreed:

1. Measure UK manager perception of e-HR tools in the organisation, incorporating the following main topic areas:
 - Personnel Management Roles and Responsibilities
 - The Usefulness and Ease of Use of the e-HR Tools
 - HR Support, Communications, and Training
2. Establish baseline measures of UK manager perception that will provide a basis for internal benchmarking and analysis of trends over successive future survey administrations
3. Identify any specific aspects of e-HR tools/functionality that play a key role in driving positive and/or negative perception.

4. Design the survey instrument so that analysis of responses provides clear direction as to specific actions that may be taken to improve perception of the e-HR tools in the future and provide informative signposts for next step investments.

In respect of objective 1, the survey items were developed to take account of the emerging literature at that time, with particular influence attributable to the ideas of Snell et al (2002) and Galliers and Newell (2003). As described earlier in Chapter Two, these works drew attention to the potential consequences of the 'virtualization' or at least 'significant leaning' of HR and the concept of an information infrastructure which is flexible and embracing not just data and systems, but the human infrastructure, (roles, skills, capabilities, viewpoints etc.). In particular, Galliers and Newell (ibid) raised the importance of the distinction and tension between efficiency and innovation when organisations seek to harness the increasing power of technology that purports to offer 'best practice' standardised processes, often associated with ERP systems.

Taking these factors into account led to the creation of the three main dimensions in the survey item pool.

Dimension 1 - 'Personnel Management Roles and Responsibilities' – is concerned with how line managers perceive their own personnel management responsibilities and those of the in-house personnel function. These speak to the transformational aspects of e-HR and explicitly link with the research question: Does e-HR support an unfolding importance or appreciation of People Management?

Dimension 2 – 'The Usefulness and Ease of Use of the e-HR Tools' – is concerned with how line managers perceive the operation of the e-HR tools in their daily lives. This speaks to the operational and relational aspects of e-HR and explicitly links to the research questions: To what extent are the data and information provided by e-HR systems seen to be of value to line managers? Do line managers perceive the e-HR systems to be easy to use?

Dimension 3 – 'HR Support, Communications, and Training' – is concerned with the way in which HR roles, skills and capabilities were directed at preparing the line managers for their initial engagement with e-HR and then ongoing support. These aspects explicitly link to the research question: Do line managers receive good HR support to help them get the best from the tools?

The survey statements that correspond with the first objective are shown in Appendix 2. Each statement is labelled according to its alignment with the three dimensions.

Objectives 2, 3 and 4 are addressed by the statistical reporting and analysis flowing from the participants' responses.

Survey Item Pool Measurement

I was aware of the need to apply meaningful units of measurement for quantifying the empirical observations that would be supplied by the survey. The survey items or constructs were developed as described above to allow measurement of the underlying concepts supporting the research. In this case, a hypothesis has been explicitly formulated that the line managers' responses to the survey items can be represented using a subject-centred scaling procedure that allows individual responses to be quantified and located on an underlying continuum – the so-called Likert scale (see Latham, 2006; McIver & Carmines, 1981; Hullin et al, 1983).

In accordance with typical Likert scaling, every item is scored on an ordinal level, so that the numbers or scores assigned to objects represent the rank order (1st, 2nd, 3rd etc.) of the entities measured. A five-point-scale was used, an example of this being 'disagree', 'mostly disagree', 'neither agree or disagree', 'mostly agree', 'agree'. Likert scaling is also based on a summative model, because the responses on the different items are summated, and the sum scores of the items are assumed to be a reliable indicator of the respondent's score on the construct. The rationale behind the summation procedure is based on the assumption of unidimensionality, which embraces the notion that all items enjoy equal and high correlations.

I chose this approach because it allowed the survey data to be interpreted in a number of straightforward ways, such as on the basis of favourable/unfavourable percentages, and weighted mean scores. The means were then analysed using Scree Plots and Spearman's Ranking Correlation Coefficient (Cattell, 1966) to highlight different aspects of the data, such as extreme positive and negative outcomes. The treatment of the data can be found in Chapter Five.

I was aware that if I had set out with the intention to use the survey to generate the primary or sole source of data to support my research findings, then more sophisticated approaches would have warranted consideration. For example, the 'Rasch model' (Gustafsson, 1980)

which challenges the concept of unidimensionality assumed in the Likert approach, embraces the notion that individual survey items possess different strengths and this means that an item can be stated in more or less extreme terms than another item (unlike Likert where each item is assumed to have equal strength in relation to the concept being investigated).

The statistical treatment of the results could also be examined and arguably enhanced through factor analysis (Meyers, Guarino & Gamst, 2005) and other approaches designed to reveal correlations and causal relationships within the data.

There were two main considerations that obviated the need for these approaches: first, the size of the data sample was not conducive to sophisticated statistical analysis; second, I determined that the data should be used as a source of preliminary observations and understandings, to inform subsequent investigation by interview, with members of the respondent population. The latter point in particular rendered the survey data to be of a contributory nature, rather than of primary or superior importance.

3.5.2 Interviews

In each case, I visited the managers concerned at their office premises, in Aberdeen, Scotland and Gatwick in the South of England. In respect of the Aberdeen-based managers, I was able to fit in a visit extending over three days, which conveniently occurred immediately after the British Academy of Management (BAM) conference held at St Andrews. I had presented a poster site at that conference (see Chapter Eight for details) and was therefore well positioned, geographically, for the journey to Aberdeen. My visits to Gatwick were more straightforward, as the location was within 30 miles of my home.

I feel it is appropriate to say at this point that the effort involved in simply organising the meetings and then carrying out the interviews was quite considerable, resonating with the views of Mason (2002, p 60) in that *"you must address the question of whether you have or can develop sufficient resources – in terms of, for example, time, money, skills - to perform the whole package of data generation activities which you have in mind."* Increasingly, I had come to realise that my overall investment of resources in the SchlumbergerSema research effort would significantly overwhelm the resource commitments involved in the Cable & Wireless research and was another aspect of my navigation through the 'methodological maze'.

Indeed, it is helpful to reflect on how my intended approach was consistent with, and connected to, my ontological and epistemological perspectives. In the context of case study research, where I am seeking to achieve plausible understandings based on a 'nuanced view' of the real life situation under investigation, with its 'multiple wealth of details,' the use of the qualitative interview *"tends to be seen as involving the construction or reconstruction of knowledge, rather than the excavation of it"* (Mason, 2002, p 63).

The qualitative interview, therefore, appeals to my ontological position where the perceptions of the research participants - their knowledge, views, understandings and experiences - are meaningful properties of the social entities my research is designed to explore. This connects with my epistemological position which allows qualitative data, generated from gaining access to the research participants' accounts or social constructions, to be a meaningful expression of the ontological properties described.

There is an extensive literature on conducting semi-structures interviews – eg. Milne and Bull, 1999; Robson, 1993; Gillham, 2000; Wengraf, 2001; Mason, 2002, Silverman, 2001; Wetherell et al, 2001, Plummer, 2001; Holloway and Jefferson, 2000). Some common features seem to emerge, as actions on the part of the researcher during the interview.

- A "thank you" to the participants for agreeing to be interviewed
- A question to ensure the interviewee felt their participation was entirely voluntary and they did not feel coerced in any way
- Permission to tape the interview and a projected completion date for their receipt of the transcript
- A request for the interviewee to check the completed transcript for any errors such as words they would not normally use
- An assurance I was only taking notes to act as a memory "jogger," and the interviewee was welcome to read these notes at any time
- An assurance of anonymity and confidentiality

I was mindful of these features when conducting the interviews and incorporated them to the best of my ability.

Interviews were conducted in small meeting rooms within the respective office complexes of the Aberdeen and Gatwick sites. Distractions were minimal, although some meeting rooms shielded outside noise better than others.

Interviews were conducted in a manner where I was seated, where possible, at a ninety degree angle to help make the interviewee more comfortable and ensure eye contact was not confrontational (Gillham, 2000, p 31). All interviewees initially displayed a small level of discomfort in their body language despite a friendly rapport developed before the interview. However, as the interview progressed, interviewees became visibly more relaxed as shown by more open posture changes. Awareness of the body language of interviewees is important as an indicator of how they are feeling and as a possible cue to change interview direction.

The interview questions were based on the earlier survey findings. A Microsoft Power Point presentation of the findings had been sent through to each interviewee in advance. This was intended to act as an informal guide to steer the direction of the interview but I was quite prepared to accept deviations from this, if I judged that it was appropriate to do so. Indeed, in planning my approach to the interviews, I was influenced by the words of Mason (2002, p 69) who argued that *"you will need to make sure that it is one which has the effect of firmly entrenching your research questions and your intellectual puzzle in your interview practice, because it will be on the basis of fast mental reasoning, rather than slow reference to notes and reminders that you will make important decisions."*

I felt that I was familiar with, and knowledgeable about, the research topic per se and the preliminary work underpinned by the survey had been designed to accommodate and furnish insights into my intellectual puzzle, namely how HR and line managers perceive e-HR outcomes. As such, I felt well prepared for the interviews.

Interviews were planned to last for approximately one hour and most conformed to this, including the time for introductory conversation and closure (Gillham, 2000). I should point out that of the nine interviewees, only one was female. I did not regard this as an issue. Nevertheless, I was aware of the concept of 'androcentricity', where research may be biased by a male perspective (Robson, 1993, p 64). Therefore the reader should be aware that there may be some unconscious male perspective bias in this research.

All interviews were transcribed in Microsoft Word and copies of transcripts were issued to interviewees using e-mail, to test for accuracy and for feedback on content and first impressions. A small number of amendments were raised as part of this 'respondent validation' process, largely concerning the use of some acronyms.

It is perhaps helpful at this point to examine the status or claims for the data generated through the interview process. Whilst the use of qualitative interviewing techniques was discussed earlier and shown to be a good fit with my ontological and epistemological perspectives on the research situation, how is this reflected in the way the data is represented in the transcript?

For example, conversation analysts (Heritage, 1997; Schegloff, 1972; Sacks, 1992) would argue that through the sufficiently close transcription of talk they can detect how other speakers interact or orient to each other and in so doing the transcription is not given the status of an interpretation but of a discovery. Any claims of authenticity derive from the fact that it has been specially validated by the participants themselves, in their orientations. This approach concerns itself primarily with the process and dynamics of generating talk and the transcript itself becomes the topic or focus of the research.

In my case, I set out to create an additional data resource for studying my 'intellectual puzzle.' As such, my primary focus and interest concerned the content of the transcript and its interpretation, rather than the language itself. My use of respondent validation was to seek the participants' approval of my interpretation of the socially constructed data, occurring through talk, during the interview.

This perspective raises a number of factors concerning the differences between the transcriptions and standard written text. For example, although the transcripts represent talk that has been 'written down', my transcription process modifies sentences, with the use of punctuation, such as full stops and commas, or efforts to minimise the impact of terms often used in ordinary, uninterrupted talk, such as 'um', 'hmm', 'er' and 'oh'.

I consciously operated these practices with an intention to make the transcript more readable and to protect the participants from feeling that the transcript gave a poor impression of them, such as being incoherent. This was motivated from my own experience where I had found it very disconcerting to read a transcript for the first time and observe the differences between the spoken and written language!

Other factors that may have affected the generation of the content concern my own identity as the researcher. A participant may feel ill at ease with an interviewer for a variety of reasons, many of which may be conveyed in a first impression by the interviewer's appearance and accent. As such, Wetherell et al (2001, p. 17) point out that *"It can be*

argued, therefore, that the interviewer should not try to approach participants as an insider who shares their situation or interests, but simply as an outsider."

This extends to the consideration of how the interviewer's questions influence the answers given. The questions may raise topics and problems which the participants would not otherwise have considered and alternatively discourage other topics from being raised.

I had attempted to cover these concerns by the protocol adopted in the run up to the interviews and the way in which they were conducted. The participants had already given notice of their willingness to be involved in the interview process and therefore were not coerced in any way. My independent credentials had been clearly stated in the communications leading up to the research interviews and the subject matter had been clearly set out as an examination of findings in which the interview participants had already contributed by way of their survey responses. This meant that the research was working within a conceptual framework accommodating those being studied, as opposed to an external imposition of a rigid framework of reference, invented by me as the researcher.

I fully recognise that my position as researcher in this context meant that I was adopting a central, visible position, characteristic of the interpretist approach to data collection, as opposed to the "service role' of a faceless technician" (Wetherell et al, 2001, p.17), which aligns with the positivist tradition. As such, I recognise that it would be impossible to detach myself from influencing in some ways the data collection process.

This is consistent with my ontological and epistemological perspectives outlined earlier and also addresses 'head on' the concerns raised in the first phase of research at Cable & Wireless, related to my distance from the data.

I further argue that I have taken reasonable steps to encourage 'naturally occurring talk' within the interview situation and by using standard writing conventions in the treatment of the transcript, I have sought to present a "*common sense, uncontroversial nature of the interpretation presented*" (Wetherill et al, 2001, p 36). This places emphasis on the meaning that resides in the words constructed through the social interaction of the interview process. I specifically do not seek to look through the words of the participants to some underlying meaning or uncover attitudes and beliefs of which the participants themselves are unaware. This in turn confines the analysis, discussed in section 5.4.2, to the discourse, the content of the transcript, rather than the participants who created it.

In so doing, I fully recognise and admit that it is entirely improper to suggest that the contributions made by the research participants represent their 'true' inner states or perceptions towards the subject matter. This limitation is again consistent with the interpretist position, which accommodates uncertainty within the data and any subsequent interpretation. This position accepts that the transcript as a form of language cannot neutrally reflect the talk or action which it purports to record.

These aspects resonate with the concept of 'reflexivity' described by Seale, Gobo, Gubrium and Silverman (2006, p 367) as "*something of a buzz-word in recent qualitative methodology literature.*" Essentially, it represents the attempts by the researcher to "*understand the subjectivism through which research materials are produced...and means being aware of how our own experiences, knowledge and standpoints inform our behaviour with, and interpretation of, our informants.*" (Ibid, p 367)

Analysis of Interview Transcripts

All interviews were transcribed from the tapes and interpreted using template analysis (Silverman, 2000; Cassel & Symon, 2004).

In the first phase of research at Cable & Wireless, described in Chapter Four, I developed a simply constructed table to organise textual data, already 'themed' by a consultant. In this case, the second phase of research, I had advanced somewhat in the methodological maze and felt it necessary to consider more critically the most appropriate way to organise and analyse a substantial amount of data obtained through the interview transcripts.

After careful consideration, I elected to analyse the transcripts using the template approach, as described by Crabtree and Miller (1999) and King (2004). In this approach, which comprises a related group of techniques for thematically organising and analysing textual data, the essence is that the researcher produces a list of codes ('template') representing themes identified in their textual data. The template is organised in a way which represents the relationships between themes, as defined by the researcher, most commonly involving a hierarchical structure.

As a set of techniques, rather than a distinct methodology, template analysis may be used within a range of epistemological positions. On the one hand, it can be used in research which is concerned with 'discovering' underlying causes of human action, and which seeks

to achieve researcher objectivity and to demonstrate coding reliability (for example, Miles and Huberman, 1994).

On the other hand, template analysis can be used within what Madill et al. (2000) call a 'contextual constructivist' position. Here, the researcher assumes that there are always multiple interpretations to be made of any phenomenon, which depend upon the position of the researcher and the context of the research. Concern with coding reliability is therefore irrelevant; instead issues such as the reflexivity of the researcher, the attempt to approach the topic from differing perspectives, and the richness of the description produced, are important requirements. This is the approach I used for the data analysis, which accords with my ontological and epistemological perspectives on this research set out earlier.

In doing so, I was cognisant of some cautionary advice. King (2004, p 256) makes the point that if a researcher is tempted to treat coded segments of data as units of analysis for quantitative purposes then *"this is highly problematic, however, because of the emphasis in template analysis on the flexible and pragmatic use of coding – the assumption that frequency of a code in a particular text corresponds to its salience simply cannot be made."*

Also, as previously touched upon, my primary focus and interest concerned the content of the transcript and its interpretation, rather than the language itself. This negates the arguments that proponents of discursive approaches to analysis would raise, namely that *"attaching codes to segments of text would be seen to be limiting the possibilities for fully exploring the diversities of meaning – and especially the ambiguities – in the way that language is used to construct reality."* (King, 2004, p 256)

Another consideration in respect of the approach to the analysis of the textual data was the use of grounded theory, which is supported by a substantial body of literature (examples include Strauss and Corbin, 1990; Corbin and Strauss, 1996; Carrero et al., 2000; Charmaz, 1995; Jones, 2002).

Examining this approach more closely, it appeared to align with my ontological position. For example, Strauss and Corbin (1994, p 279) have clearly stated that they do not believe in the existence of a *"pre-existing reality 'out there.' To think otherwise is to take a positivistic position that . . . we reject. . . . Our position is that truth is enacted."* They also insist that theirs is *"interpretive work and... ..interpretations must include the perspectives and voice of the people who we study"* (Strauss & Corbin, 1994, p 274). Such a position clearly

acknowledges the importance of a multiplicity of perspectives and as such the analysis would be more reflective of the context in which participants are situated.

I also became aware that the complex array of procedures in grounded theory have been developed and utilised in a way that most users would claim uncover 'real' beliefs, attitudes and values of the research participants. My stance, as previously explained, is sceptical of the existence of 'real' internal states to be discovered through empirical research. As such, I felt that template analysis was more appropriate to my research situation because it allows more flexible techniques with fewer specified procedures and accommodates multiple interpretations of the phenomena under investigation.

The process of setting up the template is described in more detail in Chapter Five.

Consideration of Proprietary Software Packages

I now wish to set out my consideration and rejection of the use of EW and other proprietary diagnostic software to assist the analysis.

While template analysis, as an approach, is conducive to the use of software packages (King, 2004; Crabtree, 1999) to assist with the process of analysis, I elected to use manual methods of inspection and coding of the data segments in the interview transcripts and to cut and paste relevant material from the individual accounts into the master presentation, set out in Chapter Five.

I documented my thoughts on the use of software to assist data analysis following my experiences in respect of using EW. I remarked that the cost of the software package, the time taken to become familiar with it and acquire confidence to use it properly, were all prohibitive factors that tended to steer me away from using such applications for future phases of the research. It is also the case that software programmes cannot make interpretive judgements about the data; their purpose is in organising and examining the data.

I do not dispute that experienced users of software such as 'NUD*IST' and 'NVivo' can work efficiently with complex coding schemes and large amounts of text, facilitating depth and sophistication of analysis. My judgement, however, was that by reading and re-reading the data, I would be able to code and analyse the data with sufficient rigour, in the absence of proprietary software. In a sense, I also felt that this approach would ensure that I remained

'closer' to the data, and perhaps this was a reaction to the first phase of research at Cable & Wireless, where my 'distance' from the data had created a number of issues.

3.6 Case Study Three - T-Mobile

The aim of this phase of the research was to build upon the previous research at CWG and Schlumberger in order to examine the perceptions of e-HR outcomes by HR and line managers at T-Mobile, an organization which had recently introduced an upgraded e-HR offering. Drawing predominantly on the previous case at Schlumberger, a similar two-stage approach to data collection was undertaken. The principles of purposive sampling discussed earlier also applied in this case; the target group comprised HR managers and line managers with knowledge and experience of using the e-HR tools.

3.6.1 Web based Survey

The web-based survey utilised the same multi-contact strategy and survey tool design considerations previously described for case study two. There were, however, some differences in that the survey item pool was changed to reflect the wishes of the internal sponsor, and also to take account of the previous research and emerging literature at that time. These aspects are now explained in more detail.

It has already been stated that the ideas of Lepak and Snell (1998), Snell et al (2002) and Galliers and Newell (2003) had influenced the design of the previous survey. At the time of the T-Mobile research, the work of Shrivastava & Shaw, (2004) Fisher & Howell, (2004), Ruel et al (2004) and Bell et al (2006) were particularly helpful in stimulating thoughts about potential refinements. For example, Ruel et al, (ibid) articulated the increasing move to the application of web-based systems and mobile communications technologies to change the nature of interactions among HR staff, line managers and employees from a pure face-to-face relationship to a technology-mediated one. Through such technology-mediation, e-HR had begun to replace or complement face-to-face relationships and HRIS with a 'smart self-service relationship', customised content and greater individualization of services. By doing so it had created a parallel internal HR virtual value chain, complementing the existing physical internal HR value chain. I was keen to capture as much information as possible about these aspects and accordingly additional survey items were incorporated (e.g. relating to a technology-mediated HR service called 'HR Direct'). Bell et al, (2006) had pointed to the challenges facing HR professionals in an increasingly technology-mediated world and I

had wanted to probe these aspects in more detail, effectively expanding the range of statements that had constituted Dimension 1 in the Schlumberger case research (see section 3.5.1).

However, the research sponsor refused all such statements, citing that turbulence created by an internal reorganisation would have the potential to adversely affect the results. As such, the Dimension, 'Personnel Management Roles and Responsibilities' did not feature in the survey. In the absence of these statements, the research placed a heavier reliance on interview data, which is discussed in Chapters Six and Seven.

The work of Fisher & Howell (2004) had highlighted the potential for e-HR to support increased productivity and self-efficacy and the Shrivastava and Shaw (2004) model focused on the potential 'liberation of HR' and considers the technology constraints: whether to buy or build the technology; expectation setting and system implementation practices and associated change management; and the embedding of technology and how it has changed working practices and liberated HR for value-added contributions. These considerations inspired additional survey items, such as 'e-HR allows the HR function to focus more on higher value activities' and 'I feel empowered by e-HR to make more decisions without the intervention of the HR department'.

Taking these factors into account led to the creation of the three main dimensions in the survey item pool.

Dimension 1 – 'e-HR Tools, Perceived Usefulness and Ease of Use' – is concerned with how line managers perceive the operation of the e-HR tools in their daily lives. This speaks to the operational and relational aspects of e-HR and explicitly links to the research questions: To what extent are the data and information provided by e-HR systems seen to be of value to line managers? Do line managers perceive the e-HR systems to be easy to use?

Dimension 2 – 'Data Quality and Maintenance' – is concerned specifically with how the line managers perceive the quality of data (accuracy and fitness for purpose) and how they regard responsibilities for maintenance. This provides a more in-depth assessment of data quality and also links to the research question: To what extent are the data and information provided by e-HR systems seen to be of value to line managers?

In the Schlumberger survey, these statements had been bundled into a broader dimension of 'e-HR Tools, Perceived Usefulness and Ease of Use'. The decision to create a separate

dimension in this case was supported by the internal sponsor of the research, who wanted to see undiluted visibility of the findings.

Dimension 3 – 'HR Support, Communications, and Training' – is concerned with the way in which HR roles, skills and capabilities were directed at preparing the line managers for their initial engagement with e-HR and then ongoing support. These aspects explicitly link to the research question: Do line managers receive good HR support to help them get the best from the tools?

The survey statements used in the T-Mobile web-based survey are shown in Appendix 3. Each statement is labelled according to its alignment with the three dimensions. In this case, the survey tool was hosted and managed by EurekaStep, a company based in Horsham, West Sussex.

3.6.2 Interviews

As with the previous research case, a number of respondents to the web-based survey had given their informed consent to be followed up by way of interview. However, rather than one-on-one in-depth interviews, the process involved three focus groups. The focus groups constituted an appropriate method of data capture within the ontological and epistemological framework guiding my research, and the justification for this is set out below. Additionally, the approach had been endorsed by the internal sponsor, who offered administrative assistance to set them up, thereby overcoming an obstacle associated with this type of interview - the practicalities of assembling the groups.

Potential and Limitations

According to Kitzinger (1995), the interaction amongst research participants is the crucial feature of focus groups because it highlights their view of the world, the language they use about an issue and their values and beliefs about a situation.

It is clear from these descriptions that focus groups have the potential to provide rich insights into the research topic under investigation, but other observers also point out limitations. For example, Mason (2002) draws attention to the fact that the researcher or moderator has less control over the data produced than in either quantitative studies or one-to-one interviewing. The moderator has to allow participants to talk to each other, ask questions and express doubts and opinions, while having very little control over the

interaction other than generally keeping participants focused on the topic. Mason (2002) also cautions against the assumption that the individuals in a focus group are expressing their own definitive individual view. They are speaking in a specific context, within a specific culture, and so sometimes it may be difficult for the researcher to clearly identify an individual message.

Having assessed the potential and limitations, I elected to proceed on the basis that the focus groups held out the prospect of providing insightful qualitative data, on the assumption that a good spread of opinions could be captured within a well moderated setting. These insights would be consistent with my overall research approach, where I was seeking to understand the perceptions held towards e-HR by HR and line managers at T-Mobile.

The Role of Moderator

The role of moderator was alluded to earlier, as a key component in facilitating the interaction amongst focus group participants. In this case, a dual moderator set up was used and I was accompanied by a female research assistant from Bournemouth University. This meant that I could focus on ensuring that the session progressed smoothly and that taped transcripts were produced for respondent validation. My colleague ensured that the necessary topics were covered. This approach also worked very well from the perspective of offsetting the potential for 'androcentricity', where research may be biased by a male perspective (Robson, 1993, p 64).

Focus Group Composition

In this case, three focus groups were held, involving a total of 15 line managers; three at focus group 1, three at focus group 2 and nine at focus group 3. These sessions took place between December 2006 and January 2007 at the headquarters of T-Mobile in Hatfield, Hertfordshire.

Each focus group lasted for approximately one and a half hours and the taped transcripts were in each instance returned to the focus group participants for respondent validation. No comments were received and this supported an assumption that the transcripts were accurate.

Line managers were drawn from a variety of functional specialisms and different directorates, for example, Information Systems, Finance, Sales Operations and Customer

Services, which mitigated the risk of biased reporting which could have arisen from focusing on just one area of the organisation.

Prior to each focus group session, the participants were provided with a synopsis of the web survey results as a guide for discussion.

3.4 Discussion

I have attempted to inform the reader of the ontological, epistemological and methodological implications of my research. Having assessed relevant literature and interpreted this in the context of my research, an argument has been made for the use of a case study approach that embraces both quantitative and qualitative methods. The resulting findings are expected to reveal a plausible understanding of the ways in which managers perceive e-HR in different organisations. These organisations are viewed as social entities that cannot be precisely explained by statistical analysis; neither do they claim to represent a universal or generalisable perspective.

To further explain my position, I find it helpful to reflect on the words of Flyvberg (2006, p 223)

“For researchers, the closeness of the case study to real-life situations and its multiple wealth of details are important in two respects. First, it is important for the development of a nuanced view of reality and.....Second, cases are important for researchers’ own learning processes in developing the skills needed to do good research.”

The ‘nuanced view of reality’ guards against a highly prescriptive approach to reality, belonging to the scientific tradition and the reference to the researcher’s personal development certainly resonates with my aspirations and experience.

My overall research aim was to achieve critical insights into the world of e-HR that would withstand robust peer review and the fair and reasonable application of the Business School’s criteria for assessment of doctoral qualities. I endeavour to document references to my own background theories and values that guide the research. These perspectives naturally affect the construction of the observations and conclusions; it is assumed by me that there are enough reflexive contributions in the discourse to demonstrate my stance on this (Wetherell et al, 2001; Bannister et al, 1994).

The application of these research perspectives to my case studies is described in more detail in the following chapters.

Chapter Four

The First Phase of Research - Cable & Wireless

4.1 Research Setting

Building upon the background information contained in the introduction to this thesis, I shall now attempt to paint a picture about the context surrounding the research.

When the research was conducted, the e-HR programme had been underway for some time in terms of building the business case and attempts had been made to disseminate this case to the wider business through occasional bulletins on the company intranet. Also, I made regular personal presentations, occasionally supported by my team members, to meetings being held by various managers throughout the business, with the aim of informing them about the nature of the programme. Importantly, however, no major aspects of e-HR functionality had been delivered at this point; the Employee Self-Service (ESS) and Manager Desk Top (MDT) functionality, designed to enable a significant devolution of activities from the HR function to the wider business, were still a few months away.

The timing of this research, conducted between July 2001 and November 2001, was designed to capture a baseline level of sentiment towards e-HR prior to the main implementation. My view at the time was that the information would supply useful insights to me in my position as e-HR Transformation Programme Director and my team, to enable us to create a more receptive environment within the line manager population ahead of the delivery of e-HR.

The following sections provide a succinct account of the essential characteristics of the organisation and how these affected the HR strategy, the drivers for e-HR and the resulting e-HR architecture.

4.1.2 Essential Characteristics of Cable & Wireless

This organisation at the centre of this research, Cable & Wireless Global (CWG), was formed in the autumn of 1999 when a new structure was announced for a number of the Cable & Wireless Group's businesses. The aim was to create a global organisation to focus strongly on data and Internet Protocol (IP) based services for business customers. Activities were organised around key geographic areas – UK, USA, Japan and Continental Europe, allied with a Global Markets operation responsible for managing the top 85 customer accounts on a global basis. In total, this new entity employed some 25,000 staff at the outset, of which about 700 were in the Human Resources (HR) function.

The main board of CWG announced a strategy to develop a global business, in which all individual entities would share global business processes. In essence, this meant that core processes in finance, procurement and HR would be performed in the same way around the world. The only permissible variants to these would be local processes required for legal reasons.

To help achieve this, the CWG board also announced that the business would be comprehensively e-enabled, allowing managers and employees direct access to information and a range of business processes via computerised systems and the company's intranet.

4.1.2 HR Strategy

The response from the HR function to the CWG board's global e-enablement strategy was the setting up of the e-HR Transformation programme.

I was appointed by the Group HR Director into the role of e-HR Programme Director in January 2000. I was not an HR professional; in fact, I had never occupied a formal role in the HR function of any business but I did have considerable experience as a line manager, and as such being a customer and recipient of HR services. As the programme progressed, I became heavily interwoven within the CWG HR function and my formal reporting lines were to a senior HR Director and also to a Steering Board, comprising the global HR Leadership Team and representatives of the finance, business development and audit functions.

When I started the research process in July 2001, I viewed it as an opportunity to help me achieve my personal business goals and those of the wider team. It is not intended to

provide a detailed description of the C&W organisation in this thesis; suffice to say that it was going through major, unprecedented change in response to global trading conditions and the e-HR programme was one of a number of initiatives designed to transform business practices and generate cost savings for the business. The key business drivers, inherent issues and tensions observed and experienced by me at that time will be explored in so far as they are considered to have relevance in explaining my perspectives on the research.

4.1.3 e-HR Goals

A full business case, which I had developed with my team and other stakeholders, was delivered in November 2000 to the Capital Authorisation Board of CWG, seeking full funding of the programme through to completion. This was originally estimated to be £12 million, but subsequently increased to £16 million.

The principal business objectives justifying this investment were stated as:

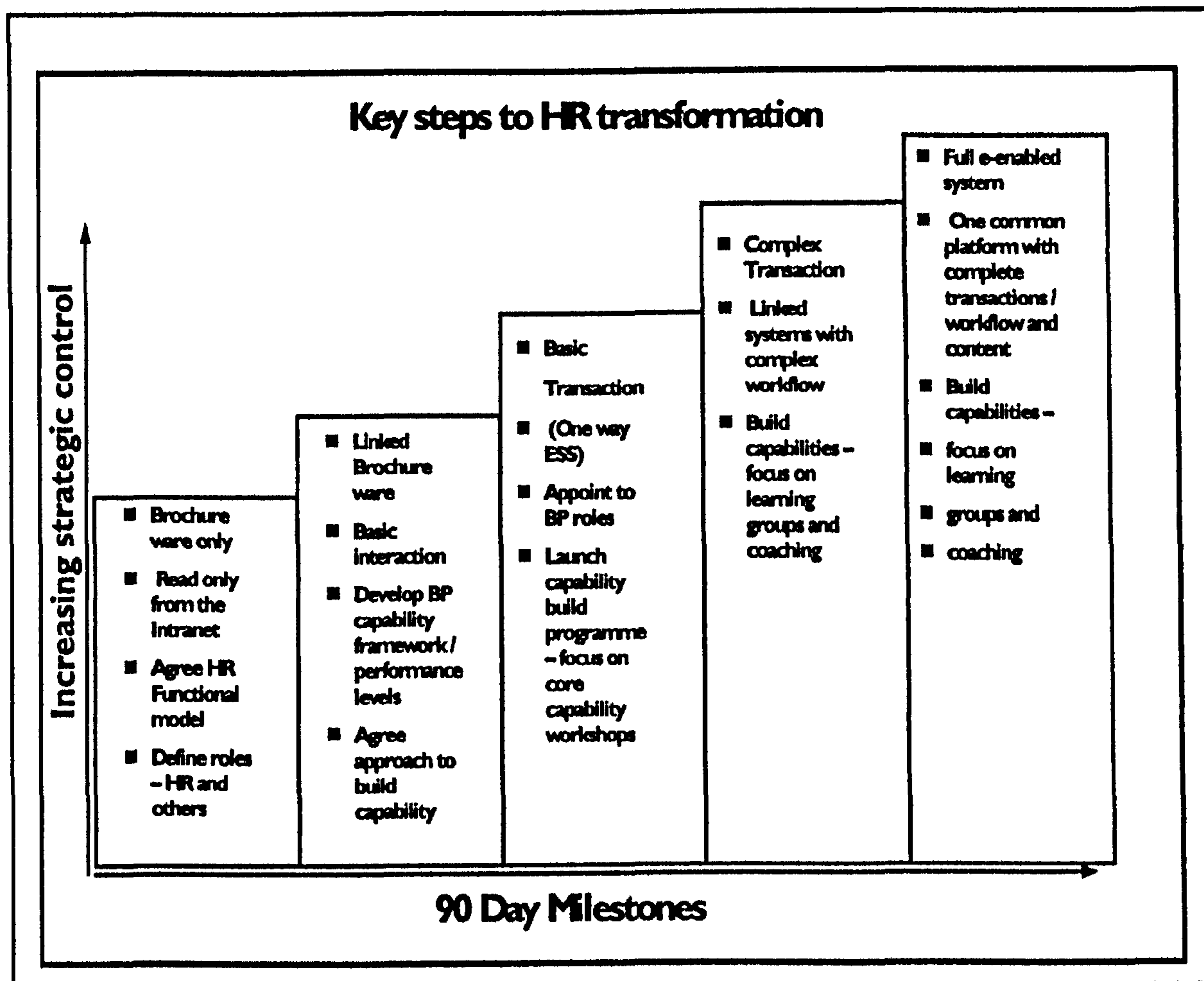
- Reduced cost of HR per employee in CWG (Reduction in overall size of budget to achieve same or higher standard of delivery)
- Reduced HR headcount in proportion to employee numbers in CWG
- Reduced cost of recruitment
- Increased delivery of e-enabled learning
- Reduced cost of administration

The tangible benefits accruing to HR from the full delivery of e-HR Transformation were estimated at £13 million per annum. These benefits had been identified via a series of workshops in each of the jurisdictions and agreed with the CWG HR Leadership Team. These tangible benefits – ones that could be easily measured and converted to a quantifiable cost saving - were the only benefits used in the cost-benefit calculations.

4.1.4 e-HR architectures

The various steps to transforming the HR function at CWG, underpinned by e-HR, are depicted in Figure 12.

Figure 12: E-HR Transformation Road Map



Note: BP, Business Partner; Workflow, system generated routing of requests and instructions: e.g. holiday request from employee routed electronically to employee's line manager for approval.

This depicts a progressive transformation of technology architecture, moving from simple 'brochure ware' – view only content, rather like pages of a brochure – to a fully e-enabled system based on a 'common platform', which meant retiring numerous HR systems around the world and replacing them with one system. The system chosen was SAP.

The plan also allowed for the incorporation of external applications or tools, such as e-recruitment and e-learning, although these are not explicitly referenced in the road map. In parallel with the changes in technology, it can be seen that attention is given to up-skilling the HR function, through the creation of Business Partners.

The combination of transforming the HR technology and HR capability is depicted as moving the HR function progressively towards a more strategic operation, in response to the e-HR drivers, which focused on cost savings in delivering HR services and the leaning of the HR function.

4.2 Data Sources

As described in Chapter Three, the data were collected by an external consultant using a process called Stakeholder Dialogue, followed by my using a software tool called Enquire Within™ (EW). A total of eight HR managers and four line managers were participants in the research.

4.3 Data Analysis

This was presented to me by the consultant as a short report, which identified *Key Issues*, defined as those issues that indicate areas of common concern or critical importance to the implementation of e-HR.

The key issues were separated into the two broad participant groups, HR managers and line managers. The report also drew attention to the potential advantages from effective implementation of e-HR:

4.3.1 Potential Advantages Identified by Both Groups

- I. Will make more information available without having to go through a third party
- II. Improve efficiency and effectiveness of HR
- III. Provide line managers with direct access to powerful tools to support resourcing

- IV. Speed of response and consistency across the company, saving time and costs

4.3.2 HR Managers' Key Issues

The following Key Issues as defined above were identified as follows: -

a) Issues relating to keeping data current

- I. Will require strong process environment and systems discipline to gain confidence that the data is current and can be relied upon for management purposes
- II. Will only be successful if all staff recognise the need for on-line information and play their part in keeping data current
- III. Unreliable information will create sceptical and reluctant users

b) Issues relating to flexibility of the system

- I. All purpose forms may be too complex for groups that require a limited amount of support i.e. small professional groups
- II. Rigid process standards and policies may make changes to information requirements difficult to obtain
- III. Dealing with exceptions will be more cumbersome and time consuming

c) Issues relating to increased workload for line management

- I. Less HR support will increase burden of work for line management already under pressure

d) Issues relating to the need to achieve successful implementation

- I. Concern that Business Partners will not have time to focus on implementation given their current workload and everything else that is going on in the business

- II. Feeling that there has not been enough information/education to enable the Business Partners to be expert enough and have faith in the system they are required to advocate
 - III. Need for senior management sponsorship and communication to indicate the priority and importance of this initiative to the business
 - IV. Rushing to achieve a financial target may mean a less effective launch
 - V. The need for “champions” at business level to encourage and support
 - VI. Feeling that pressure is being applied to get it launched quickly rather than get it launched effectively and in good working order
- e) **Concerns about how to ensure efficient use of the systems and that they are updated so that any advantage for the business will be maintained**
- I. The need to police data quality at least initially rather than rely on managers and employees to get it right
 - II. Concern that line managers will be distracted by administrative tasks if they are not given sufficient support
 - III. Need for line managers to have sufficient and continual motivation to use the systems themselves
 - IV. Need also to emphasise the responsibility of line management and employees for own data
 - V. Fear that managers will avoid use and leave tasks to secretaries/administrators
 - VI. Concern that the system will stagnate if there is not the ability/requirement to review and update it on a regular basis
 - VII. How to deal with the culture shock of being required to interface with a machine rather than a human being

- VIII. Need to understand who has ultimate responsibility for effectiveness of the system and how this will be monitored/measured
- IX. How easy will it be to get programming changes made for new policies?
- f) **Concerns about how to secure buy-in with line management and employees**
 - I. e-HR will work if all employees buy-in and 'play the game'
 - II. Need for benefits to be made crystal clear and for the system to deliver what it promises
 - III. Usage by line management is key – important to maintain momentum long enough for it to become a day-to-day desk top tool
 - IV. Important to emphasise the relevance to all system users
 - V. How will line managers react to having to take on what they traditionally see as an HR role? What will be the impact on the credibility of HR?
 - VI. Not enough consultation with the business communication and/or involvement on significant changes which may therefore be rejected
- g) **Concerns about the impact of organisational initiatives and changes**
 - I. How the potential decision to outsource will affect the delivery of e-HR – is the focus of e-HR then shifted deflecting attention and delivery
 - II. Is it right to take out heads and costs before support systems are in place?
 - III. The company downsizing /restructuring has not helped the project with many delays/issues arising from this

4.3.3 Line Managers' Key Issues

The following Key Issues were identified as follows: -

- a) Issues relating to keeping data current and flexibility of the system**
These echoed those of the HR managers
- b) Issues relating to increased workload for line management**
 - I. Less HR support will increase burden of work for line management already under pressure
 - II. More transactional activities will be supported by secretaries, administrators and PA's
 - III. Will mean extra clerical work for line management
 - IV. HR may take too much of a 'hands off approach' creating lack of consistency of employee assessment
 - V. Need to avoid overload of managers of small professional groups with procedures designed to accommodate thousands of employees
- c) Concerns about support and training**
 - I. Will enough time and effort be invested in training and support?

4.3.1 Critical examination of first pass data analysis

My first critical observation was the disappointingly low response rate from line managers to the questions posed in the Stakeholder Dialogue process. My judgement was that the numerical bias in favour of the HR management population was attributable to the higher level of engagement of the HR managers at CWG with the e-HR implementation process. More effort had been expended by my programme team in terms of involving these HR managers in the different aspects of the programme. This was, at least in part, because they

were in a sense more accessible, simply by being within the HR function. They were also expected to be principal ambassadors for the e-HR implementation within the business.

By contrast, the line managers had been engaged by my programme team to a lesser extent; more reliance had been placed on the HR managers to carry out this function and the inference was that this had probably been performed poorly at this stage. It was not possible for me, due to my distance from the data capture process, to ascertain if the HR managers had informed their respective line manager communities about the research, in order to stimulate some degree of awareness in advance of receiving the research questions. This may have contributed to the line manager research population feeling less engaged with the process, not to mention the possibility that they may have only shared, at best, a passive interest in the research anyway.

As such, I understood that the feedback contained inherent limitations from the outset. Whilst the views expressed by the HR managers may have been reasonably representative of that population, the same could not be claimed for the line managers. Having said that, the views expressed in the feedback to the research questions did enable some appreciation of the way the target manager population perceived the outcomes of e-HR, and was certainly sufficient to act as the basis for a comprehensive communication to those managers to complete the Stakeholder Dialogue process. .

Having used the findings as a basis for feedback to the research participants, I also wondered how they might be used as a basis for comparison with the literature. In my deliberations on how best to do this, I pondered the words of Tesch (1990, pp 128-129):

“For the most part, concrete ways of handling data have passed on from one researcher generation to the next by word of mouth. It is not very glamorous to talk in a scholarly book about piles of paper, stacks of index cards and newsprint on one’s living room walls and coloured pens. Many novice researchers simply, and sometimes to the point of exhaustion, experiment until they have invented their own scheme.”

Accepting that I probably qualified as a ‘novice researcher’, I judged that it might be helpful simply to construct a table would allow the main themes from the literature to be compared with the main findings from the consultant’s report. These themes - such as ‘Devolution of HR Activities to Line Managers’ and ‘Use of e-HR Tools’ - were then expanded into sub-categories derived from the literature. The findings from the consultant’s report were then

matched against those categories, in accordance with my judgements on 'best fit' – see Table 3.

In overview, the table shows that the participant feedback, as interpreted through the consultant's findings, appears to relate broadly to the literature. For example, item 2c) I, '*Less HR support will increase burden of work for Line Management already under pressure*', appeals directly to the concern identified in the literature about the impact of increased workload experienced by line managers, following devolution of HR activities to them (McConville and Holden, 1999; Deeks, 2000).

However, another item, such as 2d) I, 'Concern that Business Partners will not have time to focus on implementation given their current workload and everything else that is going on in the business', does not appear to offer such direct comparison. Although 'Increased Workload' appears to be the central concern, it is nonetheless addressing a concern raised by HR managers about their own situation, not the line manager. As such, it is representing a different facet of the Increased Workload problem, which would in all likelihood mean that it would cause a 'Lack of Support from HR' to line managers as the process of devolution of activities took place (IRS Management Review, 1998; Torrington and Hall, 1998). As such, item 2d) I appears in the latter category in the table.

In another example, items 2e) IV and 2e) VIII both relate to the need for understanding who has *responsibility* for different aspects of system effectiveness and I judged that potential problems in this regard would fit best with the concept of 'Lack of Role Clarity' (Bevan and Hayday, 1994; Dunn and Wilkinson, 2002).

Although it was evident that the results had a broad spread of resonance with the literature, a couple of categories - 'Increased Workload' and 'Usefulness to Manager' – stood out in terms of receiving more frequent references than any of the other individual categories, perhaps suggesting that these concerns were most prominent within the participant population.

There were also some notable examples of dissonance with the literature. The notion of advantage being conferred by HR assuming a more *transformational* role (Ulrich, 1998; Towers Perrin, 2002) did not feature at all, which suggests that neither HR or line managers, in this situation, recognised the existence of this potential benefit.

Table 3: Participant Feedback Mapped to Themes from the Literature

Themes and Categories	Feedback Reference	
Potential Advantages	Section 4.3.1	
Operational (cost savings/efficiency)	II, IV	
Relational (improved quality)	I, III, IV	
Transformational (more strategic role for HR)		
HR and Line Manager Key Issues and Concerns		
	Section 4.3.2	Section 4.3.3
<i>Devolution of Activities to Line Managers</i>		
Lack of clarity of roles	e) IV, VIII	
Inconsistencies in implementation	d) V; f) VI	b) IV
Increased workload	b) III; c) I; f) V	b) I, II, III, V
Lack of Institutional and personal objectives	e) III, V, VI	
Lack of adequate preparation and training	d) II, VI; f) II	c) I
Lack of support from HR	d) I, III; e) II	
<i>Use of e-HR tools</i>		
Ease of Use	f) III,	
Usefulness to manager	b) I; e) I, II, III, IX; f) I, IV	
Data quality	a) I, II, III; b) II; e) I	
Cost effectiveness	d) IV; g) II	
Alienation of 'human' HR services	e) VII	
<i>Others</i>		
Company downsizing/restructuring	g) III	
Potential affect of outsourcing	g) I	

Within the category of 'Concerns about the impact of organisational initiatives and changes', a matter which receives a good deal of attention in the literature in the field of HR's absorptive capacity to conceptualise and deliver change through technology (for examples, see Martin, Alexander, Reddington & Pate, 2006; Zhara & George, 2002), only a small number of concerns were registered. This might signify that these concerns were genuinely of a lower order within the overall scheme of things, or they may have been very important but simply expressed very succinctly.

I accept that my interpretation of the consultant's findings, as set out in the table, is imprecise and open to alternative views. Whilst on the one hand it suggests a broad correlation between the research findings and the literature, it is also open to criticism. My 'distance' or lack of access to the verbatim accounts of the participants diminished the richness of the analysis and it was difficult to get a sense of the relative weight of the issues or concerns or how many stakeholders shared a particular view.

It became evident to me that I had set out with the clear intention of conducting a rigorous and credible piece of research, with my own researcher bias kept to a minimum, but in the process my desire for objectivity in a social setting had moved me onto the 'high hard ground' in Schön's 'varied topography of professional practice' and removed me from the 'swampy lowland' where the research problem existed.

Given these limitations, I discussed the research findings with a number of my colleagues in the programme team and also with members of the Programme Steering Board, which had responsibility for monitoring the progress of the programme. There was a degree of consternation, based on the perception that the number and types of issues or concerns raised appeared to outweigh the advantages.

The requirement to provide feedback to the research participants, as set out in the Stakeholder Dialogue process, became a thorny issue. There were some requests to 'tone down' the version fed back to the participants or even to abandon it completely. I steadfastly maintained that we had a responsibility to the participants to provide a faithful representation of the results and that in my view, the credibility of the e-HR Transformation Programme would be tarnished if we failed to observe that responsibility.

After considerable discussion, it was agreed to issue the consultant's findings in full to the participants, together with the e-HR Transformation Programme team's response (see Appendix 4). This response was originally scripted by me and then approved by the Project Steering Board. It was sent out by the consultant to complete the Stakeholder Dialogue assignment.

4.3.2 Reflections on the Stakeholder Dialogue Process

My views about the limitations of the process of data capture and analysis have already been discussed. Given that situation, the closure of the exercise, culminating in the feedback to the participant population, left me pondering a few key questions:

How would the participant group respond to the feedback and what impact would it have on their perception of the e-HR Transformation Programme?

Did the exercise really help those managers that had bothered to respond to the original set of questions?

Could I extract greater richness of information from the existing data?

It was evident to me that in order to deal with these questions, further research would be necessary. In respect of the first two questions, it would involve further engagement with the original participant population. I saw this as an exercise that could be performed as part of a 'spiral of cycles of planning, acting, observing and reflecting' within the framework of action research in CWG.

In respect of the last question, I realised that I would need to find a way of probing the original data captured by the consultant. The e-mailed verbatim responses that constituted the data had been concrete accounts, rendering them less susceptible to 'constructions of the general sense of what the person had said' in the first instance. This data, however, was susceptible to the consultant's personal perspectives, thereby influencing the interpretation of those verbatim accounts for reporting purposes. In the absence of any visibility of the verbatim accounts on my part, it was impossible for me to judge whether the reporting was accurate.

I decided that the best way to probe this would be through re-visiting the raw data, as opposed to its interpretation set out in the consultant's report. To do this, I adopted a process called Enquire Within™. The methodological rationale supporting the use of this tool was described in Chapter Three.

4.3.3 The Enquire Within™ Interview

Earlier, I identified the need to access the original data, in an attempt to address my concerns associated with the consultant's report generated by the Stakeholder Dialogue process. I determined that I needed to find another method that would allow a reframing of the data, aimed at driving out new understandings.

On the day of the interview, I spent the first couple of hours with the consultant explaining the rationale for using EW and how this represented an attempt to enhance the quality of the data analysis whilst preserving the key principles of soundness and integrity that underpinned the overall research approach.

The consultant had never encountered EW before and was initially very curious as to the methods used by the software package to illicit or illuminate critical insights into captured data. There were some questions around the use of that data, i.e. the outputs of the EW process and the purposes for which that information would be used. I was able to convince the consultant that the confidentiality of the Stakeholder Dialogue process would not be violated, and that the identities of the research participants would not need to be disclosed at any stage of our interview.

Secondly, I made it clear that the consultant (the interviewee in this process) would be entitled to receive the outputs of the Enquire Within™ - effectively the interviewee's mind map of the data - stressing that the interview process, aided by the computer software, was designed to deliver results free of bias from me, the interviewer.

After the interviewee had understood and accepted the disciplines of the EW interview process, it was agreed that we would meet again in 7-10 days time, which would allow time to give serious consideration to the creation of possible *constructs* – the bipolar distinctions that would be used to probe and organise the interpretation of the data captured from the twelve *elements* (the research participants involved in the Stakeholder Dialogue process).

The interview itself took place in a neutral venue – the offices of a company called EurekaStep, just outside Horsham. This was an excellent environment in which to conduct the interview – we had a very spacious and quiet meeting room and the scenic views from the window were quite outstanding. I also had use of a high definition projector, which allowed me to display the workings of the EW software onto a large screen. This was judged to be particularly helpful during what proved to be an interview process lasting eight hours. The session began rather well. The elements were identified as 'A' thru 'L' respectively. These elements – the twelve research participants – were separate *discrete* entities with no possibility of one element including another. My role as researcher was to operate the EW software tool in the most professional way possible and to try to maintain some semblance of momentum and progress within the interview. However, I was extremely mindful of the need to refrain from unreasonable or undue intervention, so as not to be seen by the interviewee as attempting to convey an implicit suggestion that only a certain kind of construct would be possible.

As a consequence of this decidedly cautious approach, the process of producing constructs was very lengthy. Over a period of about eight hours, 21 constructs were created, of which 13 of those were then *laddered up* by 3 levels – the maximum permissible within the software programme. The laddering up process within EW takes you towards what are called *core constructs* – the important values and preferences formed about the topic being examined. The idea is that progressive laddering up ultimately creates a situation where constructs start to coalesce and the remaining *core constructs* represent the distillation of the most fundamental thoughts on the subject. The process used to achieve laddering up was based on my asking the interviewee why a particular construct appeared to be important and the reasons for this were then captured.

An example of a construct that has been laddered up by three levels is shown in Box 1. In this example, the EW software initially prompted me to ask the question:

Reconsidering the Construct, 'HR Manager' – 'Line Manager', why is that an important distinction to make about the research participants?

The interviewee's initial answer was: *Different responsibilities in respect of implementation.*

The EW software then prompted me to ask:

Why do you say: 'Different responsibilities in respect of implementation' is important?

The interviewee's answer was: *'It will affect day-to-day tasks'*.

Box 1. Example of 'Laddering Up'	
Construct: 1	
Similar Pole	Contrast Pole
HR Manger	Line Manager
Laddering Up:	
Difference in impact on role and function (3 rd)	
It will affect day-to-day tasks (2 nd)	
Different responsibilities in respect of implementation (1 st)	

The process was then repeated to complete three levels of laddering for construct 1 and in a similar fashion for constructs 2 to 21 inclusive. The full range of 'laddered up' statements can be found in Appendix 5.

After the completion of laddering up, the process of *laddering down* commenced. Laddering down is a method for learning more about the operational differences (what the interviewee observes) between the poles of the constructs that have been captured. EW offers three laddering down dialog boxes, each phrasing the question in a slightly different way, but all essentially directed to asking the question:

"Tell me more about how elements (research participants) which are HR managers differ from elements which are Line Managers, in terms of what you observe, how they behave, etc."

An example of a construct that has been laddered down is shown below in Box 2.

Box 2. Example of 'Laddering Down'

Construct: 1

Similar Pole

HR Manger

Contrast Pole

Line Manager

Laddering Down

HR managers have greater responsibility for roll out and implementation of e-HR

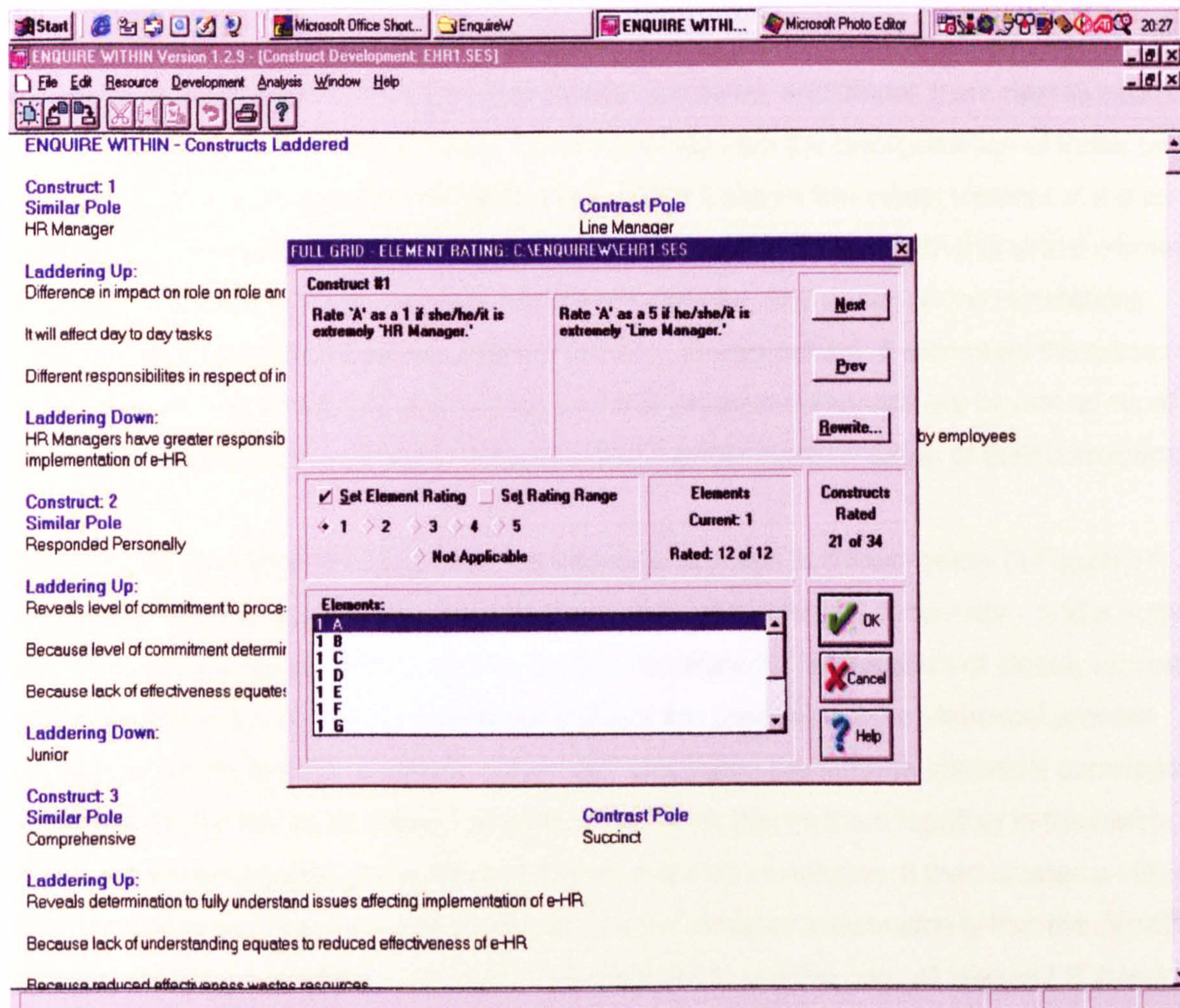
Line Managers have greater responsibility for encouraging use by employees

Thirteen of the original 21 constructs were ladderred down, each to one level. The direct consequence of this was the creation of an additional 13 constructs, i.e. constructs 22 – 34 inclusive. The full set of ladderred down constructs can also be seen in Appendix 5.

At this point, a potential dilemma was surfaced. We jointly recognised that the process of EW would ultimately involve comparing and ranking every *element* with every *construct* and it became apparent that the creation of new constructs through ladderred down would lengthen the overall interview process. Taken to extreme, additional iterations of ladderred up and ladderred down could have been performed on the newly generated constructs, creating a seemingly never-ending interview process. In the interests of time, and the need to generate some kind of analysis, it was mutually agreed between us that no further ladderred down activity would be conducted beyond construct 13.

The final phase of the interview then took place, with the interviewee ranking each element against a given construct, as prompted by the EW software. Figure 13 shows a screen shot of this operation, the example being construct 1 highlighted earlier. In the background, it is also possible to see parts of other constructs formulated by the interviewee.

Figure 13: Example of Element Rating Process



During this process, it became necessary to re-express one of the poles of construct 6, to enable more meaningful and confident ratings. The re-expression changed a pole originally defined as 'expressed mutuality' to 'expressed positivity'.

Due to pressing time constraints, only constructs 1 thru 21 were rated against each element. Whilst this fell short of the 34 constructs available, I followed the guidance notes for EW, which stated that as a rough guide you would expect at least twenty constructs to be given by someone who has a reasonable degree of knowledge of the topic (and the topic has some degree of complexity). On that basis, I considered the efforts made to be acceptable.

When this process had been completed, the EW software, at the click of a mouse, then produced a *dendritic analysis* of the results. This is now discussed in more detail below.

4.4 Analysis of Results

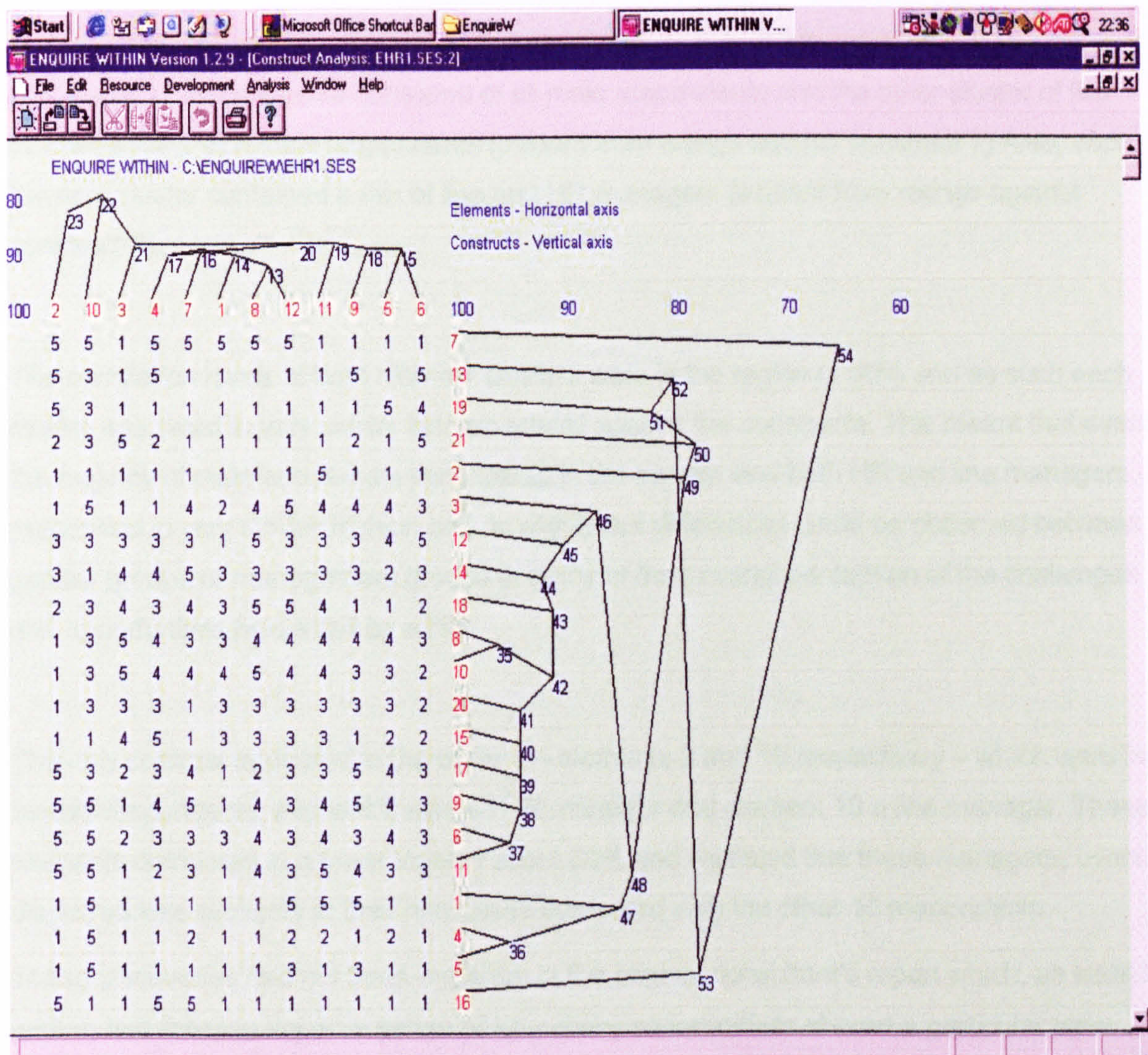
The dendritic analysis is the statistical process, and graphical representation, used by EW to analyse the matrix which results from the rating of elements on constructs. EW inspects all the elements, calculates which two are most closely correlated, and places them next to each other in the grid. It then substitutes a 'virtual' element formed from the amalgamation of these two elements; draws a point on the correlated axis where it shows this virtual element at the level of correlation of its two component elements; and re-calculates the grid with this virtual element substituted. It goes on doing this until it has accounted for, and drawn all the correlations between the elements and placed them in 'families' as appropriate. It then does the same for the constructs, but taking into account the fact that because constructs are bipolar some of them might need to be reversed in order to make a better representation of their correlation.

The dendritic analysis resulting from the interview process is shown below in Figure 14. This revealed a number of *clusters* – closely correlated elements and constructs - and a number of *outliers* (elements or constructs less closely correlated). The clusters of closely correlated elements and the less closely correlated outliers are generated by a statistical process configured within the EW software. When EW calculates the various statistical correlations it looks first for the two most closely correlated elements, places them together in the matrix, and draws a point equidistant above them at the level of their correlation. It then creates a *virtual element* and places it at the point it has just created. Another observation is that the dendritic analysis renames the original 'element A' as 'element 1' and the original 'element B' becomes 'element 2' and so on.

As such, virtual element 13 is made up of real elements 8 and 12; elements 8 and 12 then disappear from the rest of the calculations, and are replaced by the new element 13 and the process is repeated.

The same happens for other similar occurrences in the analysis, including the constructs. So for example, constructs 8 and 19 form virtual construct 35. The number 35 is allocated because 34 real constructs had been generated in the interview process originally, even though only 21 constructs were actually rated against the elements to produce the dendritic analysis.

Figure 14: Dendritic Analysis



The dendritic analysis resulting from the statistical correlation process just described now allows the researcher the opportunity to *differentiate* the elements and constructs. The principle underlying the differentiation process is that *meaning lies in function*, and therefore that elements which the interviewee rated as very similar to each other have very similar meaning to that interviewee; and that constructs which are used in similar fashion to each other imply that very similar judgements will be made with each construct. The differentiation process therefore challenges the interviewee to say whether these close correlations are in fact truly representative of the subject matter.

4.4.1 Element Clusters

In the case of the elements, re-inspection of the original data revealed that the closely correlated real elements – clusters 3, 5, 6, 9, 11 and 1, 4, 7, 8, 12 - were genuinely similar. The first cluster of five elements consisted of all male respondents and the other cluster of five elements were all female respondents (evident from ratings against construct 7) Also, each element cluster contained a mix of line and HR managers (evident from ratings against construct 1).

The correlation levels of both element clusters were in the region of 90% and as such each cluster was rated in very similar fashion overall against the constructs. This meant that overall the majority of male and female participants in the survey, and both HR and line managers, had responded in very similar fashion and no significant differences could be observed between gender groups or management groups in terms of their overall perception of the challenges and opportunities presented by e-HR.

The only contrast appeared in the outliers – elements 2 and 10 respectively – which were both female respondents; element 2 was an HR manager and element 10 a line manager. These elements correlated at a lower level of about 80% and revealed that these managers, overall, displayed less similarity in their responses compared with the other 10 respondents.

These discoveries had not been apparent in the original consultant's report which, as stated earlier, had failed to impart a sense of how many stakeholders shared a particular view.

4.4.2 Construct Clusters

The construct differentiation process allows for constructs which are semantically similar to be combined into one, and for closely correlated constructs to be left in place if the interviewee feels this is more important. The essential idea is to investigate whether it is possible to replace clusters of multiple constructs with single *core constructs* that represent an irreducible distillation of the important values and preferences that the interviewee has formed about the topic under examination. The process requires a careful re-examination, construct by construct, to see if they start to coalesce whilst still expressing the most fundamental thoughts of the interviewee.

An examination of the constructs reveals highly correlated clusters in the 90% to 95% range, featuring constructs 6, 9, 11, 15, 17, 20, 12, 14, 18, 8, 10, 4, 5. This means that EW is identifying constructs that should be re-examined to see if it is possible to conflate them into a smaller number of core constructs.

In response to this, a cursory examination of some of the correlated constructs was possible, which certainly exposed the need for further investigation and refinement. For example, the interviewee interpreted construct 18 - *creating opportunities to engage more strategically with staff/creating opportunities to engage more tactically with staff* - as being similar to construct 14 - *not excited about possibilities/very excited about possibilities*. This implies that opportunities for strategic engagements with staff are less exciting than opportunities for tactical engagement with staff.

Another close correlation occurred with construct 4 - *happy to be followed up/did not want follow up* - being closely correlated with construct 5 - *appeared familiar with e-HR to comment further/not sufficiently familiar with e-HR to comment further*. This implies that research participants that appear to have familiarity of understanding with e-HR are also happy to engage in the interview process, whereas those who are not sufficiently familiar with the concept of e-HR are not happy for follow up.

It was very apparent, just from the examples described above, that the clustering warranted much more detailed examination and analysis and appeared to hold out the capability to produce a smallish number of core constructs – the EW instruction manual suggests six or seven would be sufficient.

Similarly, the constructs that had a lower level of correlation, for example constructs 2, 13, 19 and 21, which correlate at around 80%, also warranted re-examination to discover if the constructs could be refined or even deleted.

The interviewee, however, did not wish to proceed any further with the interview process, citing severe time constraints and mental exhaustion! Consequently, this brought the interview process to an end.

4.5 Critical reflection on Enquire Within

I begin my critical reflection by focusing on the mechanics of the EW process.

Whilst I could not deny the rigorous nature of the process and its low susceptibility to any bias from me as the researcher and interviewer, it became apparent that the full richness and elicitation of critical insight into the subject under examination through this method could not be exploited unless it was possible to shape and define a set of irreducible core constructs.

On the basis of my experience, to do this requires well practised, skilful and confident use of the EW tool, using its functionality to maximum advantage. This, in turn, would require recognition at the outset that the process is likely to be very lengthy and potentially wearisome. It is clearly necessary to prepare very thoroughly beforehand and to have the support, tolerance and patience of the interviewee.

I believe that if it had been possible to achieve a set of core constructs, each rated against the elements, it might have provided a more meaningful, quasi-statistical analysis to complement the findings of the Stakeholder Dialogue process.

This situation also highlighted another aspect of the use of the EW software tool. I had used it in a manner designed to examine more closely the superordinate purpose of the exercise, namely: *To gain further critical insights into the earlier findings of the 'Stakeholder Dialogue' process.* In this endeavour, I had interviewed the consultant, in order to generate the consultant's cognitive mind map of the data. Using the EW tool in this way assumes that the interviewee is the expert on the subject under investigation and the mind map is a way of uncovering and representing the understanding of the interviewee of the research situation.

On reflection, whilst my application of the tool in this way was technically permissible, I accept that it represented a sub-optimal process. The interviewee had assumed 'expert status' on account of collecting and performing first pass analysis on data derived from the Stakeholder Dialogue process; data that I had been denied access to throughout the entire research effort. As the researcher, directing a global e-HR Transformation Programme at CWG, I could have assumed the role of expert and used the tool to generate my cognitive mind map of the research situation, based on the data from the research participants. However, in the absence of this, my use of EW was the best that could be achieved under

the circumstances and once again revealed the difficulties created by my earlier decision to remain remote from the data, in the interests of hygienic research.

When I weighed up the investment in time, effort and financial outlay (the EW software cost £450) against the results, I concluded that it probably would not be a part of my research approach going forward. Indeed, perhaps its greatest contribution was highlighting the need for me to search out a better multi-perspectival approach for my subsequent research activities.

4.6 Overall Reflections on Initial Research at Cable & Wireless

I learned an enormous amount from my initial research exercise. During the course of the analysis, I became acutely aware of what Phillips (1992) describes as the 'historicity' or 'pre-understanding' which researchers bring to the research situation. This historicity determines the researcher's own behaviour and understanding of the behaviour of others and its acknowledgement is central to interpretive approaches to qualitative research. Within this research paradigm, knowledge or understanding can only be provisional: interpretations are always open to re-interpretation.

I had certainly discovered through the process of the initial research exercise that the outcomes represented knowledge that had been 'personally and reflectively constructed' and therefore susceptible to reinterpretation. This position concurs with my ontological and epistemological perspectives discussed in Chapter Three.

I had endeavoured to conduct a rigorous research process, within established research protocols, but I accept that my first foray into doctoral level research had illuminated the challenges of the 'methodological maze' leading to a first hand appreciation of the position articulated by Mellor (1998, p 459), when he admitted: "*I eventually came to accept that my struggle in the swamp was the methodological path to find a better method.*"

It is helpful to review the key outcomes, as I saw them, which emerged from the initial research exercise:

4.6.1 Review of Key Outcomes

The inferential outcomes of the initial research, albeit susceptible to reinterpretation, did provide a basis for comparison with the benefits and challenges identified with e-HR in the literature. Whilst there was a broadly-based resonance, as evidenced in Table 3, other factors emerged, such as an apparent absence of any notion of potential benefit from the transformational role of the HR function. The concerns about the impact of organisational initiatives and changes, a matter which receives a good deal of attention in the literature in the field of HR's absorptive capacity to conceptualise and deliver change through technology, also seemed muted.

The EW process revealed that HR and line managers had responded in similar fashion overall to the constructs developed through the cognitive mind mapping technique, suggesting that there were no sharp distinctions in the way these two communities viewed the challenges and opportunities presented by the e-HR programme at CWG.

4.6.2 Lessons for Subsequent Research

- 1. The research at CWG highlighted a number of themes that could be explored in future research activity – such as data quality, perceived challenges and benefits and communications related to e-HR. However, the research also highlighted the need to capture managers' perceptions in a research situation where e-HR has been implemented.**
- 2. I had to ensure that in future research I would have direct access to the collected data**
- 3. The partnership concept (Ulrich, 1998; Holbeche, 2001) recognises that it is simplistic to assume that HR management should be undertaken either by line managers or by the HR function as separate entities. Instead, it is advocating recognition that ultimately it is line managers who have overall responsibility for putting HR into effect, and that trying to create partnerships with HR personnel represents a viable way forward. This emphasis on line managers having overall responsibility for putting HR into effect made me realise that I had to find a way of increasing the sample size of this constituency in future research.**

My intention to undertake cycles of planning, acting, observing and reflecting in CWG was not possible because, as explained in Chapters One and Three, I left the organisation in October 2002. The initial research, therefore, constituted a single case study, which would inform future research.

Chapter Five

Research Case Two - Schlumberger

5.1 Research Setting

This research was undertaken after my departure from CWG. I was very fortunate to meet the sponsor of the research - the Schlumberger UK HR Director - following a conference I attended in Brussels in 2003 (for more details see also Chapter Eight). When presented with the opportunity to conduct the research at Schlumberger, I was determined to incorporate the lessons learned from my previous research experiences at CWG, and this meant reassessing the research architecture (see Chapter Three for details).

The research took place between November 2003 and September 2004 in two subsidiaries of the global parent; one based in Aberdeen, Scotland and the other in Gatwick in Southern England. The Aberdeen based organisation was 100% owned by the parent and part of its 'Oilfield Services' operation, and the Gatwick based organisation, known as 'WesternGeco', was 70% owned by the parent and under its management control. This approach allowed 'within case' analysis between two different organizations.

Just prior to the commencement of the research, Atos Origin announced the acquisition of the core IT services of SchlumbergerSema in a £1.0bn cash and shares deal. This was to allow Schlumberger to concentrate on its core oilfield activities, both of which were serviced by the subsidiaries at the centre of my research.

I mention this because it did create some turbulence in the Schlumberger operations in the UK, resulting in heightened caution within the HR teams and attendant impacts on the survey item pool. These impacts were captured in the beta test phase – see section 3.5.1.

The following sections provide a succinct account of the essential characteristics of the organisations and how these affected the HR strategy, the drivers for e-HR and the resulting e-HR architecture.

5.1.1 Essential Characteristics of Schlumberger Parent and Subsidiaries

Parent Organization

Since the 1920s, the parent company, Schlumberger, had grown both organically and through acquisition into a global organization employing 64,000 staff in eighty countries. To create high levels of customer service it depended on high levels of international team working and knowledge sharing. This reliance on knowledge and technology caused them to describe themselves not only as a leading oilfield services provider but also as information systems specialists, who could support their customers by translating data into useful information, and then transform this information into knowledge for improved decision making around the globe. Given their strategy of creativity, collaboration, and high levels of customer intimacy, the levels of understanding of customers' needs, managing international diversity and knowledge sharing required a great deal of international teamwork. Thus, the espoused values of the parent company were built around 'people being the organization's greatest asset'. Employees were to be supported by excellent technology to deliver sound profits for shareholders, requiring a high proportion of the organization's profits to be retained for Research & Development (R&D) investment in the twenty-three research and engineering facilities worldwide. The organization also embraced a geocentric international staffing policy in which the selection and deployment of managers reflected a balance between (a) the needs for differentiation and sensitivity to the cultures and institutions of the host countries in which they operated and (b) the needs for integration with the corporate values of the parent company (Gooderham & Nordhaug, 2003; Perlmutter, 1969).

Subsidiary Organizations

The oilfield services subsidiary, referred to as 'Aberdeen' for the purpose of this research, supplied a wide range of services including directional drilling, consulting and IT infrastructure services to operational drilling platforms in the North Sea and other areas off the Scottish coast. Its operations were based in a collection of premises in Aberdeen.

The other subsidiary, referred to as 'Gatwick' for the purpose of this research, provided comprehensive reservoir imaging, monitoring and development services to a variety of client organizations. The operation was headquartered in premises adjacent to the South Terminal of Gatwick Airport.

The underlying and most important difference between them was that Aberdeen had a long history of being part of the parent company, whereas Gatwick had been acquired a few years prior to the research. Consequently, the culture and organization of both subsidiaries and the relational attitudes with the parent company were quite distinct. Aberdeen was a well-established and well-integrated part of the corporation and relations between parent and unit managers were mature. As one respondent commented:

"At Aberdeen, you've got more or less a lot of people who have grown up (with the parent company) and as such I would say that could explain some of the difference Gatwick."
(Aberdeen Line Manager)

Gatwick, not having been fully integrated into the corporation, had less mature relations between parent and unit managers, as illustrated by a comment from another respondent:

"there is a stigma in Gatwick in a sense that there are many diverse organizations located there.... because there is a much more diverse range of people working, I don't think you have the same level of bonding" (Gatwick Line Manager)

These differences were exacerbated by recent redundancies at Gatwick, which caused line managers to be highly sceptical of HR initiatives in general, since they were heavily implicated in the redundancies. A further important difference was that Aberdeen had a stable nucleus of managers co-located at a small number of sites, whereas the managers at Gatwick were mostly dispersed and located at a wide variety of clients' premises to carry out their assignments.

Further contrasts related to the sophistication of the HR function in the two subsidiaries: Aberdeen also had a better developed HR function with a higher ratio of HR business partners to line managers than Gatwick. Moreover, line managers in Aberdeen had previous positive experience of the initial e-HR tools on which to base their expectations. As one manager from Aberdeen suggested:

"I'm not familiar with the organizations in Gatwick, but I know Aberdeen is where there's a large number of international staff who have used these tools on an international basis and I certainly used them when I was in the States for 3 years and they were beneficial."
(Aberdeen Line Manager)

5.1.2 HR Strategy

Thus, given this innovation strategy and 'glocalized' staffing policy, the HR function was seen as pivotal to the development of international team working and knowledge sharing. The HR function had a crucial role in developing culturally-sensitive management and in so doing was required to shed its administrative workload to concentrate on culture management and change issues. However, the company was also keen to see HR embedded into the business and historically had adopted a policy whereby HR managers and line managers would regularly interchange to carry out each others' roles. The HR function was being gradually transformed into a more strategically-oriented function, in which HR staff worked more closely with managers in the new operating structure.

To achieve this, the HR function was firstly divided into the now common shared services (termed 'Employee Services' in Schlumberger) and business partner model (Ulrich & Brockbank, 2005). Employee Services provided administrative and policy support with HR business partners (Personnel Managers) providing direct support to business-facing managers in the field. Secondly, Employee Services adopted a global HRIS to allow it to become more efficient and effective in providing globally-available data for all service lines and all business groups from the same database. This allowed consistency and integration of performance management and other HR practices and policies throughout the company. Thirdly, e-HR was introduced to improve service delivery by opening up the access to the HRIS using manager and employee self service applications.

5.1.3 e-HR Goals

Thus, the strategic goals of e-HR of the parent organisation were primarily concerned with improving service quality and freeing up time for HR staff to address more strategic issues. *"So when we looked at it we realised that in order to do that we had to take off a lot of the administrative load from the HR function in each of the groups and let them focus much more on people and thenwork with one another around people issues because that's the cultural driver and let all thesupport stuff be taken care of somewhere else."* (UK HR Director)

5.1.4 e-HR Architectures

First, these goals were to be achieved through the development of a common HR portal, through which all on-line services could be accessed. The intention of this portal was also to help HR to create a greater sense of corporate identity among employees in the extended enterprise using an internal employer branding strategy (Martin & Hetrick, 2006). Second, the company implemented a global HRIS, comprising a set of basic information systems and the first set of e-HR tools, branded as 'slb.people'. These technologies were a combination of 'out of the box' applications, derived from the global HRIS, combined with bespoke tools, many of which were developed in house.

The parent company's internal analyses had shown that *"there is a cost saving...but that cost saving does not offset the cost of implementation and investment cost. It might do in the long term but if you're looking at sort of two/three year returns it doesn't work."* (UK HR Director)

The real benefit being sought was an improvement in HR service quality, providing more accurate and reliable data, and enabling more informed management decisions. The company, however, had a longer term transformational goal of introducing ICT to improve human capital management through the development and introduction of a bespoke global 'career centre'.

HR functions were aligned with national operating companies, with service centres established to handle transactional enquires from line managers and employees. The emphasis was on the internal sourcing of HR technologies, unless a compelling case could be made for outsourcing of services. As the HR Director explained: *"I think outsourcing overall is quite dangerous because outsourcing is....in many cases it's cost driven and if it's cost driven why should another organisation be able to take some cost out which you can't?"*

5.2 Data Sources

As described in detail in chapter 3, the data were collected from two main sources: a web-based, 'point and click' survey, which also allowed free text responses followed by in-depth, semi-structured group interviews with nine line managers, with eight lasting about one and a half hours and the other was very short – a matter of a few minutes. The survey data sources are summarized in Table 4. A survey response level of 43% was achieved for the line manager population of each subsidiary. The number of line manager interviews in

each subsidiary was proportional to their respective sizes. Five other managers who had given permission to be interviewed were inaccessible. Each manager is identified very simply by their location and job role – see Table 5. This identification allows their contributions to be tracked in the analysis.

Table 4: Schlumberger Survey Data Sources

Organization	Interviews	Web-based Survey*	Response Level
Aberdeen	Line managers (6)	27	43%
Gatwick	Line managers (3)	13	43%
Totals	9	40	

* The figures shown represent the number of line managers responding to the survey

Table 5: Schlumberger Line Managers

Location	Job Role	Interviewee	Identification
Gatwick	Support Manager	1	G1
Gatwick	Finance Manager	2	G2
Gatwick	Business Development Manager	3	G3
Aberdeen	Health & Safety Manager	1	A1
Aberdeen	Field Services Manager	2	A2
Aberdeen	Projects Manager	3	A3
Aberdeen	Account Manager	4	A4
Aberdeen	Contracts Manager	5	A5
Aberdeen	Information Management Manager	6	A6

5.3 Analysis of Survey Data

The full list of survey statements can be found in Appendix 2. The linkage between these statements and the central research question was explained in Chapter Three.

The following sections dissect the data in various ways with the aim of producing interpretations that I consider helpful in shaping an understanding of perceptions of e-HR outcomes.

It is acknowledged upfront that this analysis is not exhaustive, in terms of establishing every conceivable relationship between items. As stated previously, the initial data capture via the survey involved a relatively small sample and did not lend itself to complex statistical analysis. However, this does not detract from the intent behind the survey, which was to inform the interview process. I was not setting out to develop my central arguments purely on the basis of the statistical treatment of the survey data.

5.3.1 First Pass Analysis based on Favourability

Composite Comparisons

Table 6 provides a summary of the results of the questionnaire on three broad dimensions: 'Personnel Management Roles and Responsibilities' (Dimension 1); 'e-HR tools, their Perceived Usefulness and Ease of Use' (Dimension 2); and 'Change Communications, HR Support and Training for e-HR' (Dimension 3). The results are based on a simple aggregation of percentage of favourable responses to each of the questions corresponding to the three dimensions since, as previously stated, such small samples are not conducive to sophisticated statistical analysis. The favourable percentages combine the favourable/agree and very favourable/strongly agree scores; the middle percentage represents neutral scores, while the unfavourable percentages combine the unfavourable/disagree and highly unfavourable/strongly disagree scores.

Table 6: Results of Web-Based Survey among Line Managers on e-HR

Dimension	Aggregate responses %			Aberdeen responses %			Gatwick responses %		
	F	N	U	F	N	U	F	N	U
	1	66	21	13	74	17	9	51	31
2	60	22	18	68	18	14	43	29	28
3	51	22	27	58	22	20	37	22	41

These results suggest that Aberdeen managers exhibit more favourable or positive perception than their line manager counterparts in Gatwick within the categories selected. These categories were agreed with the internal sponsor of the survey (see section 3.5.1). They also formed the basis of the report produced for the internal sponsor, and guidance notes sent to line managers in advance of the interviews.

5.3.2 Analysis based on Weighted Mean Likert Scores

To examine the results in more detail, the scores for each item were then calculated on the basis of mean weighted values and compared in various ways. Appendix 2 shows all the statements used in the survey, grouped according to the broad dimensions shown in Table 6. The mean value and rank order of each statement is also shown.

Overall Comparison of Aberdeen and Gatwick

There were 43 statements with means for both Aberdeen and Gatwick. The mean for Aberdeen was more positive than Gatwick for 37 statements, less positive than Gatwick for five statements, and equal for one statement. The sign test for the equality of less and more positive has a p value of 0.0000, which supports a conclusion that the responses for Aberdeen are more positive than for Gatwick, consistent with the observation previously made in the favourability comparisons.

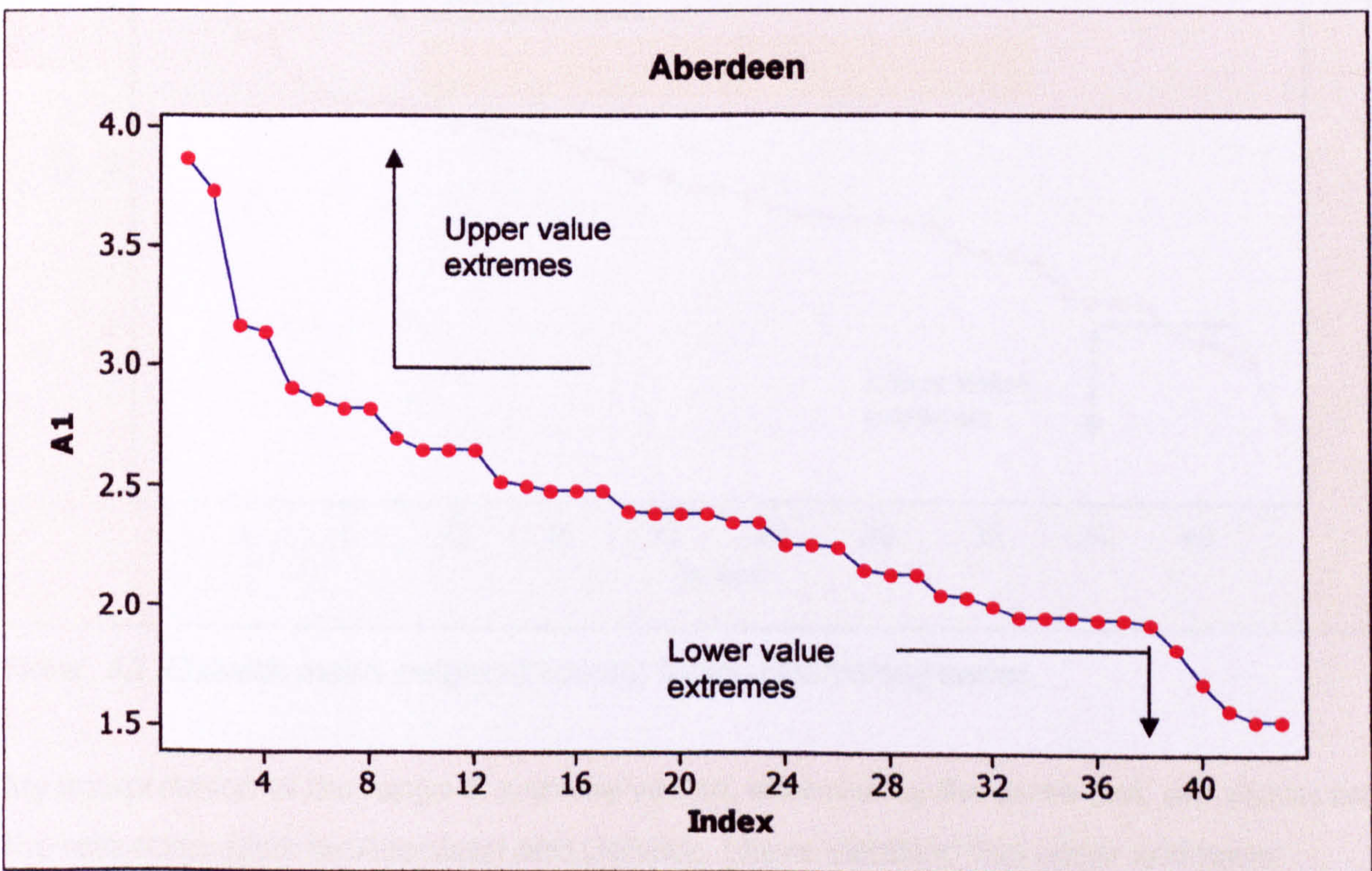
Comparing the rank order of statements

The rank orders of the statements for Aberdeen and Gatwick (see Appendix 2) were compared using Spearman's Rank Correlation Coefficient, which produced a value of 0.816. The p value when testing for a positive rank correlation coefficient is less than 0.01. Hence it can be concluded that the two samples are in agreement in that both subsidiaries display highly similar rank orders. This means that within each organization, the line manager populations responded to the survey items in a very similar fashion, from a rank perspective.

Identifying Extreme Statements within Each Organization

Scree plots of the mean scores are presented in Figures 15 and 16 showing the identification of upper and lower extreme statements within each organization. Scree plots are widely attributed to Cattell (1966), who discovered that by plotting the principal components of correlation (in this case, item scores) in a diminishing series, it resembled the rubble or scree on a mountainside.

Figure 15: Scree Plot of Aberdeen Mean Scores



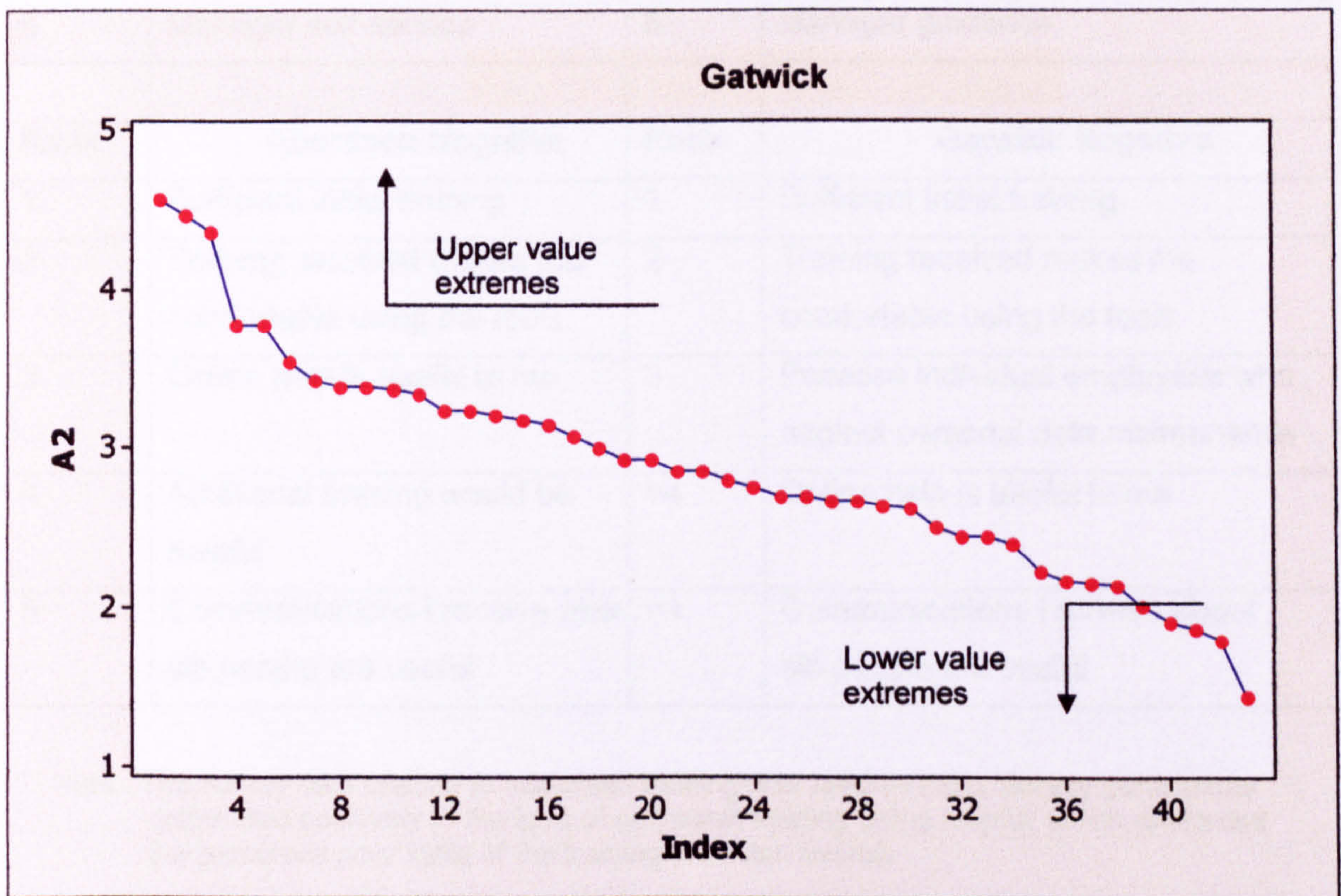
Note: A1, Aberdeen mean weighted scores; Index, diminishing series

The 'sharp breaks' represent the points of extreme. However, Hayton et. al. (2004, p 193) observed a problem with this approach, citing that:

“Although the scree test may work well with strong factors, it suffers from subjectivity and ambiguity, especially where there are either no clear breaks or two or more apparent breaks. Definite breaks are less likely with smaller sample sizes and when the ratio of variables to factors is low.”

I accept these shortcomings, which is consistent with my earlier points made in Chapter Three that the nature of my research accommodates uncertainly and reinterpretations.

Figure 16: Scree Plot of Gatwick Mean Scores



Note: A2, Gatwick mean weighted scores; Index, diminishing series

My interpretation of the range of extreme values, informed by the scree test, are shown on the respective plots for Aberdeen and Gatwick. I have identified five upper and lower extreme values in each case and the survey items corresponding to those extreme values are presented in Table 7.

Table 7: Schlumberger - Extreme Statements Representing Positive and Negative Perception

Rank	Aberdeen Positive	Rank	Gatwick Positive
=1	Performance Management	1	Performance Management
=1	Career Centre	2	Understanding of individual people management responsibilities
3	Understanding of individual people management responsibilities	3	Career Centre
4	HR personal data audit	4	Individual performance data
5	Manager self-service	5	Manager guidance
Rank	Aberdeen Negative	Rank	Gatwick Negative
1	Sufficient initial training	1	Sufficient initial training
2	Training received makes me comfortable using the tools	2	Training received makes me comfortable using the tools
3	Online help is useful to me	3	Penalise individual employees who neglect personal data maintenance
4	Additional training would be helpful	=4	Online help is useful to me
5	Communications I receive about slb.people are useful	=4	Communications I receive about slb.people are useful

Note: The survey item relating to additional training was reverse logic. Survey participants responded positively to the idea of additional training being helpful, which reinforced the perceived poor state of the training provision overall.

Analysis of Extreme Positive Responses

The statistical breakdown shows that the three most extreme positive responses at Aberdeen and Gatwick were associated with the same survey items, relating to the usefulness of the Career Centre and Performance Management tools, and having a clear understanding of their individual people management responsibilities.

Aberdeen managers also responded positively to the notion of HR assuring the reliability of system data by conducting audits, and the usefulness of manager self-service. Gatwick managers responded positively to the quality of individual performance data and manager guidance and help.

An examination of the free text responses in Appendix 6 reveals very little in the way of explicit favourable comment to support the statistical analysis of the survey item data. Free text comment 5 makes the point that *"SLP3 [performance management] is good; career manager is good."*

Interestingly, however, the positive responses associated with accurate individual performance data, manager self-service, manager guidance and HR personal data audit, receives no endorsement within the free text comments. Quite the contrary; for example, comment 5 refers to the fact that *"it is hard to find personnel data so most managers I know bug the personnel centre."* Comment 16 makes the point that *"Regarding the accuracy and quality of the data, it is a struggle to get accurate vacation days taken correctly."* This negative aspect is supported by another manager (comment 9), who states: *"If I wish to answer an employee question about what leave entitlement is when a partner is ill it is impossible to navigate from the [manager] hub."*

These negative sentiments are not isolated; in fact, the majority of the free text comments point directly or indirectly to concerns and frustrations with e-HR. The negative responses to e-HR are now discussed.

Analysis of Extreme Negative Responses

The statistical breakdown shows that four out of the five most extreme negative responses at Aberdeen and Gatwick were associated with the same survey items, relating to concerns about the usefulness of initial and total training, communications, and on line help. There is also a strong negative response at Gatwick expressed towards the notion that employees should be penalised for failing to maintain their personal data. This appears to suggest that managers are resistant to the notion that devolution of these activities should be accompanied by transference of accountability.

There is a seeming abundance of evidence available in the survey free text responses to substantiate the negative responses arising from the statistical analysis of the survey item data.

The training receives most weight of criticism. One manager states, *"I was not aware of Manager Hub until 2 days ago, no training has been given so it was hard to give answers to many questions,"* (comment 17) whilst another remarks, *"Since I have not been trained on slb.people, most of the questions are irrelevant."* (comment 12)

Perhaps the most telling indication of apparent neglect of training is summed up in the remark: *"I have managed people in Schlumberger since 1995 and do not know what you mean by slb.people."* (comment 5)

With regard to online help, one manager remarks that *"If an online help exists I don't know where it is located - I tried to access the User Training but it was either very slow or wouldn't load."* (comment 15)

On the question of individual accountability for the maintenance of personal data, one manager remarks: *"Regarding the accountability of employees for their personal information, it should be proportional to the importance of the data required"* (comment 16). This suggests a variation in the scale of accountability (and possibly associated penalisation) should be practiced.

Other criticisms and concerns are also revealed in the free text responses which are associated with matters beyond the survey items. For example, one manager draws attention to the blurring of personnel and data: *"If you start at the [manager] hub and try to find a travel policy, expenses form, compassionate leave policy, defensive driving booking, the distinction between QHSE, personnel and accounts is very blurred."* Another manager, also pointing out navigation problems, states (comment 5): *"The employee hub has many areas which are restricted but no information to explain who has access to what and when."*

Other concerns suggest potential alienation of the employee through adoption of slb.people. As one manager comments: *"I have not had too much involvement with slb.people, but I would like to point out that in my opinion, you can never really spend too much time on HR with your team"* (comment 6). This is reinforced by another manager who says, *"The tools are good but let's not have them rule our business lives. Use them as tools and focus on human interaction"* (comment 14). Another suggests that *"a just middle needs to be found"* in terms of the balance between using the tools and human interaction and that a failure to achieve this could lead to *"demotivated people with impact on the operations"* (comment 18).

Perhaps the most direct reference to the dangers of relying on slb.people is to be found in the remark, *"Too much web!!!!!"* (comment 7)

5.3.3 Overall Reflections on the Survey

The deployment of the survey was useful in a number of respects and served to address, at least partially, some of the 'lessons for subsequent research' described at the end of Chapter Four. On this occasion, I had been allowed access to a research situation where e-HR, in the form of slb.people, had been implemented and therefore perceptions of actual users had been captured. I had also been in direct control of the data capture, allowing me to interpret the outcomes. Importantly, too, I had managed to penetrate the line manager community and secure forty research participants, a significant uplift compared with the study at Cable & Wireless.

The results raised a number of interesting points, in particular the differences exposed between two different subsidiaries in their perception of slb.people. This suggests that contextual factors may have an important part to play in this but equally suggests that more needs to be discovered to *"reveal the multiplicity of factors [which] have interacted to produce the unique character of the entity that is the subject of study."* (Yin, 1989, p 82)

The generation and use of the survey data provided an informative foundation for further activities to help shape a multi-perspectival view of the research situation and enhance the validity of the research. Indeed, as one manager responded in the survey free text commented: *"I think you should ask specifically for the types of enhancements to slb.people that employees would like to see – both from the perspective of the employee and from that of the manager. Perhaps a follow-up questionnaire after a suitable period of time? Generally a well thought out survey."* (comment 13)

After a discussion about the results with the HR Director of Schlumberger, I was given conditional permission to approach the respondents who had voluntarily given their names in the survey tool, with an intention to conduct one-to-one interviews to elicit more detailed views about slb.people. This aligns with use of qualitative interviews to discover more *"depth, nuance, complexity and roundness of data, rather than the kind of broad surveys of surface patterns which, for example, questionnaires might provide."* (Mason, 2002, p 65)

The details of this phase of the research are set out in section 5.4.

5.4 The Interview Process

The methodological basis for conducting interviews was fully described in Chapter Three.

The web-based survey had captured the names of fifteen individuals, each of whom had expressed an interest in being contacted for follow up interview. I had received permission, in principle, from the HR Director to conduct interviews with them, but with the proviso that the exercise was approved by the HR managers responsible for each subsidiary.

Since the web-based survey had taken place, one of the HR managers (responsible for the Aberdeen subsidiary) had left on maternity leave and had been replaced. In order that the new Aberdeen HR manager could be fully briefed on the nature of the research project, the HR Director organised a teleconference, to allow me to discuss all relevant aspects with him and the HR manager at Gatwick.

Following this teleconference in March 2004, it was agreed that each of the HR managers responsible for Aberdeen and Gatwick would issue an email to the relevant line managers in their organisations, paving the way for me to follow up with them directly.

Frustratingly, other developments intervened to prevent this happening within a reasonable time scale; the HR Director and the HR manager responsible for Gatwick both left within a short period of each other. This created a disruption in the sponsorship of the research project and no action was undertaken for several months until the situation had stabilised. At this point, the project was reactivated and the respective HR managers at Gatwick and Aberdeen gave me express permission to send out e-mails to all relevant line managers, in order to set up interviews with them.

5.4.1 Data Collection

The interviews referred to above were conducted between 21 July and 13 September 2004. During this period, six interviews were conducted with managers from Aberdeen and three from Gatwick. A total of six managers either failed to make themselves available or had exited the organisation. The assigned identities of the participant managers were shown in Table 5.

In each case, I visited the manager concerned at their office premises. In respect of the Aberdeen-based managers, I was able to fit in a visit extending over 3 days, which conveniently occurred immediately after the British Academy of Management (BAM) conference held at St Andrews. I had presented a poster site at that conference (see Chapter Eight for details) and was therefore well positioned, geographically, for the journey to Aberdeen. My visits to Gatwick were more straightforward, as the location was within thirty miles of my home.

I feel it is appropriate to say at this point that the effort involved in simply organising the meetings and then carrying out the interviews was quite considerable, resonating with the views of Mason (2002, p 60) in that *"you must address the question of whether you have or can develop sufficient resources – in terms of, for example, time, money, skills - to perform the whole package of data generation activities which you have in mind."* Increasingly, I had come to realise that my overall investment of resources in the SchlumbergerSema research effort would significantly overwhelm the resource commitments involved in the Cable & Wireless research and was another aspect of my navigation through the 'methodological maze'.

All interviews were transcribed from the tapes and interpreted using template analysis (King, 2004; Crabtree, 1999; Cassel & Symon, 2004; Silverman, 2000) and this process is described next.

5.4.2 Data Analysis

One of the dangers of setting up a template is caused by the researcher using an inappropriate number of codes – the labels attached to a section of text to index it as relating to a theme or issue in the data which the researcher has identified as important to his or her interpretation (King, 2004; Crabtree, 1999). Too many codes may *"blinker analysis, preventing you from considering data which conflict with your assumptionstoo sparse a set of codes can leave you lacking in any clear direction and feeling overwhelmed by the mass of rich, complex data"* (King, 2004, p 259)

I used the interview topic guide as the basis for the template, which draws to a greater or lesser degree on academic literature, my own personal experience (informed by the first phase of research) and the web-based survey. The resulting template used for analysis is

shown in Figure 17. It consists of three highest-order codes ('level one'), each sub-divided into two second-order codes ('level two').

The first level one code, 'Organisational Context' is sub-divided into level two codes: 'Workforce Composition' and 'Overall Perception of HR Services'. These are further sub-divided into lowest-order codes ('level three') which draw attention to the composition of the workforce in the two subsidiaries, Aberdeen and Gatwick, and an overall perception of e-HR, Personnel and Employee Services. These codes were selected to address evidence in the literature that points towards the importance of organisational context in influencing perception of e-HR and also the survey findings which highlighted significant differences in perception between Aberdeen and Gatwick.

The second level one code, 'Devolution of Activities to Line Managers' is sub-divided into a single level two code: 'Concerns' This is further divided into six level three codes and two level three codes, respectively. The level three codes derived from 'Concerns' directly connect to the categories identified in the literature review and also link to areas of the survey,

The third level one code, 'Perception of e-HR Tools' is sub-divided into one level two code: 'Use and Usefulness'. This is further divided into six level three codes. The level three codes derived from 'Use and Usefulness' connect to categories identified in the literature, my own experience and topics from the survey. Importantly, these matters are not concerned with devolution of HR activities *per se* to line managers, which is a feature of the literature and a theme incorporated into the second level one code, Devolution of Activities to Line Managers; rather, the level three codes more closely relate to the perception of specific attributes of e-HR, such as the provision of on-line personnel data.

I wish to state here that I discovered that one of the most difficult decisions to make when constructing an analytical template was knowing when to stop the process of development. It is possible to go on modifying and refining definitions of codes almost ad infinitum, but perhaps it would require unlimited time to produce an 'ideal' template. I accept that another researcher might choose to organise things differently and identify sections of text from the interviews that warrant inclusion in the analysis, which I have chosen to ignore. As King (2004, p.263) states, *"It is generally easier to make a confident judgement that the point has been reached to stop the development of the template where two or more researchers are collaborating on the analysis."* Consequently, as a solo researcher, my interpretation of the

data and the way it is presented is open to reinterpretation but I accept this as a general feature of my ontological and epistemological perspective on the research.

Figure 17: Schlumberger Analysis Template

- 1. Organisational Context**
 - 1. Workforce composition**
 1. Aberdeen
 2. Gatwick
 - 2. Overall perception of HR services**
 1. e-HR
 2. Personnel Services/Employee Services
- 2. Devolution of Activities to Line Managers**
 - 1. Concerns**
 1. Lack of clarity of objectives
 2. Inconsistencies in implementation
 3. Increased work load
 4. Lack of institutional and personal objectives
 5. Lack of adequate preparation and training
 6. Lack of support from HR
- 3. Perception of e-HR Tools**
 - 1. Use and Usefulness**
 1. Access
 2. Ease of use
 3. Usefulness to manager
 4. Data quality

5.4.3 Interpretation and Presentation of the Data

My account of the interpretation of the data is set out below in section 5.5. In an attempt to produce a clear and succinct thematic discussion, my account is structured around the main themes identified, drawing illustrative examples from each transcript (or other text) as required. In doing so, I was mindful of the danger of drifting towards generalisations, and losing sight of the individual experiences from which the themes are drawn. To counteract this, I include both short quotes to aid the understanding of specific points of interpretation – such as clarifying the way in which two themes differ – and a number of more extensive passages of quotation, giving a greater flavour of the original texts.

I did not, however, attempt to produce systematic comparisons between managers on the basis of gender or job role, for example. Given the lack of research into the perceptions of managers towards e-HR *per se*, my aim was to produce a rich account of experiences from diverse viewpoints. By examining the commonalities and the differences in experiences, I hoped to be able to highlight areas where more narrowly focused future research might usefully be carried out.

My critical assessment of the process appears in section 5.6.

5.5 Findings

5.5.1 Organisational Context

The research participants were assigned to either Aberdeen or Gatwick subsidiaries and the initial evidence gathered from the survey data suggested that location had a bearing on the level of perceived favourability towards e-HR. I was keen to probe this and find out from interviewees' accounts how the differences might be understood. These accounts have been grouped, as explained in section 5.4.2, into two second level themes: workforce composition and overall perception of HR services.

5.5.2 Workforce Composition

Aberdeen

There were a number of reasons put forward to suggest why Aberdeen based managers might be more favourably disposed towards e-HR. One of the reasons implied that

international staff (those who regularly undertake foreign assignments outside the UK) might be more accepting of the e-HR tools because of a favourable experience on their assignments, such as the USA. Because Aberdeen tended to have a higher proportion of these people, this may have affected the results.

"I'm not familiar with the organisations in Gatwick, but I know Aberdeen is where there's a large number of international staff who have used these tools on an international basis and I certainly used them when I was in the States for 3 years and they were beneficial, so I don't know whether that relates to maybe some of the percentage differences, quite possibly." (A2)

It was also suggested that Aberdeen had more stability in its organisation and workforce that created a sort of bonding effect or feeling of community amongst the workforce. The presence of more senior managers at Aberdeen was also cited as a possible, positive aspect of this 'community' by several managers:

"Most of the senior managers are up here in Aberdeen... so I'm wondering if that will probably influence the results as well; there's a much lesser feeling of community I guess in the South, than up here in Aberdeen." (A3)

"At Aberdeen, you've got more or less a lot of people who have grown the Schlumberger Group there and as such I would say that could explain some of the difference." (A4)

"Aberdeen is unique, out of 27 geo-markets in the world, Aberdeen I would say is unique in the sense that most of the personnel are based in the same country" (G3)

The points raised support the notion of Aberdeen being a more cohesive, stable operation, compared with its Gatwick counterpart. This was further compounded by an Aberdeen based manager, who reported that the Gatwick workforce had been exposed to greater levels of redundancy activities, compared with Aberdeen:

"I think there has been more rounds of redundancies in Gatwick than up here [Aberdeen]...which has hit Gatwick harder than Aberdeen." (A3)

"The Gatwick office has moved twice in the last 12 months...horrendously painful for everyone...so I imagine that's caused a lot of grief with people as well." (A3)

No opinions providing an alternative or dissenting perspective were apparent.

Gatwick

In contrast to the stability and feeling of community expressed about Aberdeen, a view was expressed that *“there is a stigma in Gatwick in a sense that there are many diverse organisations located there.... because there is a much more diverse range of people working, that I don’t think you have the same level of bonding.”* (G3)

Reflecting on the turbulence of the redundancy and re-location programmes mentioned above, a Gatwick-based respondent drew attention to HR’s involvement as being perceived as an ‘iron fist’:

“it (HR) can certainly be seen as the iron fist.... it has that type of reputation, not as working for the workforce but working for the management.” (G1)

These accounts suggest that the relatively more ordered and stable culture of the Aberdeen workforce has a positive impact on the perception of e-HR, also reflected in the views of a line manager, who states:

“...we have an idea that we have to use the tools and they are part of our way of doing business....We have been using computers and e-mail for a long time, so we are just using the tools as a natural extension...” (A4)

I explore these points in more detail in section 5.6.

5.5.3 Overall Perception of HR Services

Personnel Services/Employee Services

The interviews also cast some light on other factors that influenced and shaped the organisational context. These factors related to the way in which other HR services were delivered to the line managers through the respective channels of Personnel Services and Employee Services. Employee Services represent effectively the “back office function” dealing with transactional issues such as expense claims, salary payments and other administrative matters. Personnel Services provided the consultancy and business partnering services, such as assistance with recruitment, performance management and disciplinary cases.

The impression gained from one interviewee account is that Aberdeen has greater access to personnel advisors, who can provide face-to-face advice on HR matters. By contrast, Gatwick appears to have a Personnel Centre (a centralised unit) which is perhaps seen as less accessible and helpful:

"We have a big focus on the senior personnel advisers here in Aberdeen. So if I have an issue or I need some policy information that I don't have at my fingertips, then I'll just go and find my personnel advisor and ask what the answer is and get it straight away." (A3)

Another manager reinforces this view, citing the convenience of 'General Practitioner' (GP) type advice being easily available locally:

"Yes, indeed, because they happen to be conveniently located just along the corridor and you use them as your sort of, almost like your GP, where the HR services are concerned I suppose." (A6)

This situation appears to differ at Gatwick:

"I don't think that works quite the same way in Gatwick. I don't think they would go to the Personnel Centre and say 'I need this piece of information.' They just hunt around until they find it." (A3)

In terms of the line manager perception of the different roles that Employee Services and Personnel Services have to play, there was a mixed response. Some admitted to not understanding the delineation between the services:

"It's a bit of a tough question, because I'm not really sure that we manage to split the functions that well." (A6)

Another manager recognised the need for better role definitions: *"I know all the personnel services people very well but I could not name a single person in employee services. I think it would be useful to have a role definition for each group." (A3)*

Another manager felt the delineation in services was very clear to him, but questioned the view of his reports:

“For me yes, I’m not sure if it is true for some of the people who report into me”. (A4)

Perhaps the best example of a manager who feels at ease with the service model is illustrated below:

“Well my main job is Field Service Manager, so the title itself dictates that I should manage the field service operation. Man management is an important part of the business - ensuring the guys are gainfully employed; they’ve got no problems of a personal or business nature or other issues. I haven’t had to rely on personnel administration assistance much at all, to be quite honest, I seem to manage it well enough that I don’t have to rely on them. I haven’t had to take any of my guys through disciplinary proceedings but should I have to do that, then I will call on HR’s counsel. For the first time in my career, we’ve gone through a forced redundancy programme, where we have to do a ranking system on the guys we have and these are used to assess them to see who comes out at the bottom. The personnel department has guided me through that, which is good because it’s something you don’t want to go through yourself.” I don’t use them much but when I do need to use them they’re always there for me to use and I take guidance from that.” (A2)

The overall picture appears to suggest that Aberdeen has a more stable workforce, a sense of community brought about by its long established position within the parent Schlumberger organisation, and easier accessibility to HR services. Gatwick appears to have a more disparate workforce subjected to more remote working, more turbulence and the impact of office moves and redundancies. There also appears to be fewer HR personnel physically within the business.

This provides some measure of contextual backdrop against which a more detailed examination can be undertaken in respect of the way managers view the devolution of more HR activities to the line.

5.5.4 Devolution of Activities to the Line - Concerns

The whole area of devolution of HR activities to the line was covered quite extensively in the literature review in Chapter Two and this section seeks to explore the interviews for evidence filtered through the main themes in the literature.

Lack of Clarity of Roles

This refers to line managers not being adequately consulted about the devolution of responsibilities and therefore being unclear about their roles, leading to potential role conflict. It does not refer to understanding the channels for service delivery, covered in section 5.5.3.

There were no dissenting voices in respect of line managers being unclear about their responsibilities or being unwilling to take on the mantle of managing their people; quite the opposite. Various remarks underline this point:

"I'm very clear on that [his line manger role]." (A1)

"At the end of the day it's clear, it's clear what you need to do, the question sometimes is, 'do you have the time and the support?'" (A3)

"Oh yes, absolutely, definitely [clear]." (A6)

A variety of other less favourable views , however, were raised in the interviews which impinge on the perception of 'clarity of roles', such as the treatment of 'High Potential' employees within the recruitment process. These are examined in more detail in other sections and referenced accordingly.

Inconsistencies in Implementation

This concerns problems about maintaining consistent decision making across the business when HR activities are devolved to the line managers. Such problems involve the potential deterioration of quality or a degradation of standards in the delivery of HR services by line managers, and the possible formation or creation of sub groups which do things differently.

A number of managers recognised the importance of HR policy in influencing consistency of HR practices.

"I think the policy information is obviously critically important; it rules or it guides what the management do day in, day out." (A3)

"On HR Policy Information, it's clearly defined so we know what the rules are, which I believe are quite good, so knowing where we are going is important." (A4)

"Generally speaking, I think we get some very clear directions." (A6)

However, it is evident that one manager, representing the Health and Safety Executive (QHSE) is prepared to challenge and overturn HR policy in the area of Substance Abuse Screening.

"... sometimes there's a conflict (between QHSE and HR) and we have to have those discussions about which policy is going to override which policy. For example, here in the UK, we have a big issue on Substance Abuse Screening. The HR view is that because of data protection and the privacy act, we shouldn't be doing it and ours (in QHSE) is that because of safety we need to do it. So today we kind of bully the personnel people; however we are very, very aware of what the policy says and why they say it. What we've managed to do is to convince ourselves, QHSE, that if we were taken to Court on this, then we have a solid argument about how we would defend our case." (A1)

This case implies a strong sense of a line manager taking accountability for operational decisions, reinforcing the findings discussed earlier in 'role clarity'. It also suggests, however, a conflict in terms of the efficacy of HR policy, an issue not reflected in the survey results where HR Policy received a 100% favourable rating from Aberdeen managers. Perhaps this dispute also suggests that operational Health and Safety managers are prepared to 'do things differently' in terms of Substance Abuse Screening compared with their counterparts in other areas of the organisation, although no evidence could be found to confirm this.

Increased Workload

The literature (examples include McGovern, 1999; McConvill and Holden, 1999; Deeks, 2000) draws attention to the problems experienced by hard pressed managers faced with a continuing escalation in the range of their HR responsibilities and how this can also create a climate of fear and mistrust.

A number of examples from the interviews resonate with the literature; one respondent was quite vociferous in his criticism of the burden of HR administration which he attributed, in no small measure, to HR's insistence on meeting its SOP (Standard Operating Plan Targets). The SOP was viewed by line managers in some instances as a hidden agenda designed and managed by HR to accommodate the development needs of high potential employees, i.e. those that were subject to an accelerated progression to the higher levels of

management and also with a view to maintaining diversity within the workforce. This particular example shows the line managers disdain for this particular approach.

“Yes, I truly believe that Schlumberger’s no longer an oilfield services company, we’re a personnel development company, and we have an oilfield services supply company on the site just to kind of keep it ticking over....“Until they fix that problem, HR administration will continue to involve us in spending spend lots of time negotiating moves, administrating moves, because somebody has an agenda somewhere that doesn’t match the needs of the operations.” (A1)

He later admits that, *“I’m probably a lot different to most people because I’m a control freak, the more information you can give me that I can do myself, the more I like it, so you know, for me, is personnel dumping their work on me, maybe, yes but you know just keep giving it because I love it.” (A1)*

He also recognises that the situation can go too far:

“So you know, someone has to realise that they can never take 20 people’s jobs and get it done by one guy on a computer, somewhere the numbers have to stop. If that number is 5, it’s 5, if it’s 15, it’s 15, but you can’t just keep offloading more and more because something has to give.” (A1)

These concerns also connect with the notion of HR becoming more alienated from their line managers – an issue discussed later.

Another example relates to the intensive pressures placed on a line manager by the requirements of the performance review process that stipulates quarterly reviews for each member of staff:

“Think about our process that dictates that we have a quarterly review with every member of our staff, our direct reports. If you were to do it properly and you take the average number of people reporting to managers, that is obviously quite a time consuming task. Since it’s a task - you have to do it every 3 months - and when you are being monitored that you are doing it every 3 months, it gets taken out of context and people say, ‘fine, I have to do 12 guys, I’ll get them on one after the other, very quick, just to tick the box.’ (A6)

Clearly the temptation in this case is to reduce the pressure of the quarterly review process by being “very quick” simply to get through the process. This in turn, can lead to a situation where:

“What you end up having is demotivated people because the only time that they had or the only opportunity to review their objectives and discuss their own personal development with their manager is being, sort of quick, quick, quick, so I can move on to the next guy.”
(A6)

Other managers report time being wasted through the inability to access the e-HR tools. One manager remarks: *“If you really can’t access the tools efficiently, effectively and use the tools to efficiently and effectively access the data, then you’re spending too much time on it.”* (A3)

Another identifies a need for a specific tool that would save him a lot of time managing the movements of his team. *“A lot of my time is wasted on managing where the guys are, what they’re doing, that is really labour intensive. If I had a tool to do that, it’s something that could free up a lot of time.”* (A2)

The general sense of the comments implies recognition of more activities being devolved from the HR community to the line manager and this presents additional pressures and impositions. But the manager who had openly admitted to being a ‘control freak’ also identified a potential benefit in downsizing HR:

“personnel administrators, etc, are support functions and if somebody doesn’t really like the support functions right, we want people who generate revenue so if we can reduce that number of people [in the support functions] and keep revenue generators, then you know, let’s go that way....” (A1)

This links with the ‘institutionalised devaluation’ view of HR proposed by Lawler and Mohrman (2003) where HR is viewed as an function that costs more than the value it provides to the wider organisation.

Lack of Institutional and Personal Objectives

This relates to the prospect of line managers taking "people management" issues less seriously than production or service goals, thereby neglecting the important task of managing and developing the people working for them. This type of behaviour may be driven by the lack of formal or unwritten performance expectations and managers feeling dominated by "harder" priorities linked to financial or service targets.

One respondent does acknowledge that performance objectives are dominated by financial and service targets:

"Yes, the objectives are largely financially driven. Broadly speaking, managers are paid a bonus and 50% of that bonus is purely down to the financial results of their centre or the larger regional area or global performance. Beyond that, then most of the targets are business oriented rather than people oriented." (G1)

Other respondents, whilst not describing the situation with such clarity in terms of the perceived dominance of financial and service targets, acknowledge the existence of personnel-related objectives. For example, Manager A5 placed a great deal of emphasis on the quality of the HR manager to drive the notion of "look after your people." The manager went on to say that because Schlumberger was essentially an engineering company, "the attention given to HR is intrinsically linked to the HR manager in place. *"I think the statement for Schlumberger should start with the truth, you know, 'technology are our main assets and people are here to support them, and yes we want to be a good company'."*

Another respondent acknowledges the existence of some specific HR targets but raises concerns regarding the negative consequences of setting and monitoring those targets:

"So there are some very specific targets set, but my issue or my concern is that we're taking it a bit overboard in terms of quantifying and measuring and putting pressure on line managers to achieve percentages. You are dealing with people, so I can achieve all my targets but still have a completely demotivated team." (A6)

This suggests that the establishment of institutional and personal incentives in respect of the delivery and achievement of HR objectives may not in itself lead to good people management practices.

Lack of adequate preparation in training and skills

The literature in this area (Hoogendoorn and Brewster, 1992; Gennard and Kelly, 1997; McGovern, 1997; Cunningham and Hyman, 1999; the IRS Report, 2000; Marchington and Wilkinson, 2002) refer to the concerns felt by line managers in respect of being insufficiently skilled to carry out their newly devolved people management responsibilities. These concerns were largely based around insufficient training, communication and new initiatives being instigated without full and effective preparation.

Most of the respondents commented in a highly critical fashion about the lack of training, information and preparation provided by HR to allow line managers to get the best use from their e-HR tools and to perform competently in their new roles. This position is very succinctly put by one manager who says:

"I have never received HR type training in my life other than you know, when I went to the Personnel Development School, 15/16 years ago now.....[since then] these tools have all come out, they've all been thrown on that web site.....The training is terrible, it's really poor because if that information is available at our finger tips through decent training, then think of the load we would take off the personnel administrators who spend lots and lots of time answering stupid questions." (A1)

Another line manager appears equally concerned:

"I think there's a lot of information out there and a lot of information available but, we appear, when you get to manager status, never to be taught how to use those [tools] properly or efficiently and I would swear that I spend three times as much time doing things that I could do much quicker if someone would just give me the basic training to do it and the knowledge." (A3)

The lack of investment in training and development also gives rise to a level of suspicion because HR had failed to explain the implications of putting the tools in place and what was going to happen as a result:

"The tools have been put down on the table there, but people are very suspicious of what was the reason. There was a lack of training and generally the people were offered some training, but not enough..... They did not explain the implications about putting the tools in place and what was going to happen there to try to make it a bit more human..." (A4)

Another manager who was aware that Schlumberger had invested in developing a web-based interface with the SAP system, *"because we knew it would make the line manager's life easier,"* criticised the company for failing to take sufficient account of the business changes that would be required in the line manager community to educate and prepare them for the new tools:

"So we reached the point where we were about to roll out systems and we did not manage the change properly. I'm being a bit critical here about my company but that's because we have such a high confidence in our own ability to figure things out and the 'can do' attitude that is part of our culture. They thought that you do not need to have a two-day classroom training session for such a simple system; but in reality it is not as simple as people would think it is. In my view people do need, perhaps not a full week of training but maybe a 1 or 2 day course to introduce them to a new system and a new way of doing things; these tools are very powerful if you know how to use them." (A6)

The probing of this area also surfaced the need for newly developed e-HR tools to be *"completely intuitive, such as our career centre"* and which would mean that: *"You don't really need that much training but you probably need an introduction to ensure that people are using the system within the predefined processes of personnel management."* (A6)

Other comments resonate with this theme: *"I was shown how to use it [Manager Desk Top] I guess in a 15-30 minute session, one-to-one with a guy who runs it. I was lucky that he sits in this office so I can use it, I wouldn't pretend that I know everything about it but I know enough for my own purposes, so I feel I can't criticise the training on that, I had what I needed."* (G1)

However, the same line manager also says that he *"would perhaps criticise the [lack of information about the] presence of these tools.....The Managers Desk Top, I think there's an awful lot of managers who probably don't have access to it, probably because they don't know about it. The one's who find out about it, find it useful."* (G1)

Another manager makes the point that *"People don't avoid using the system because they don't want to use the system, it's because they don't know how to use it, it's a pain in the backside, it takes too long, there's an easier way to do it. Now if somebody comes and shows you how to use the system properly, you'll get familiar with the system....."* (A1)

The manager then goes on to say that *“of course there’s the other issue that unless you’re using it all the time, you forget.”* This links back to the notion that unless tools are intuitive to use, managers are more likely to require ongoing training. The same manager also asserts that the provision of on-line help seems to do little to alleviate this situation: *“forget on-line help; if something needs on-line help it’s too complicated...”* (A1)

According to one manager, another contributory factor influencing negative perception of the e-HR tools is lack of communications:

“Personally, I would say the negative reaction is probably because I don’t think we receive that many communications about many of the HR tools or opportunities to use data.....I think it almost feels that there’s a black hole out there.....” (A2)

Connected with this theme, another manager refers to lack of communication and support around the SAP system, *“so it becomes a bit of a black box to a lot of us.”* (A6)

This position appears to be disputed, however, by another manager who takes a more favourable line towards the company’s communications, subordinating relevance to presentation:

“Communications, I think they are useful, I tend to flick through them although I find they’re not particularly relevant but I don’t think there’s such thing as bad communication unless it’s badly written and I think from what I remember they’ve all been well written so, I don’t have a particular problem with that one.” (G1)

Overall, the impression gained is that Schlumberger has failed to invest sufficient resources into preparation and training on the e-HR tools *per se*, although evidence is found to suggest that in other areas, such as safety and product training, this appears to be less of a concern. As one manager remarks:

“It’s called NEST - New Employee Safety Training - and it’s a week of intensive training but that’s primarily safety. Then we send the guys to our European Learning Centre in Milan – ELC. That’s specific training for our products...” (A2)

Lack of Support from HR

The literature draws attention to the lack of skills in the HR practitioner in adopting their new role which may in turn limit the effective support provided to line managers and the successful devolution of HR activities to the line. The various sources of literature (IRS Management Review, 1998; Hall and Torrington, 1998; Lawler and Mohrman, 2003) speak to these issues.

These concerns were articulated by one line manager, who said: *"I suspect there is such a lot of very young people with not so much experience in some of the key HR functions and these people don't know how things are working sometimes, they don't understand what we are doing."* (A4)

Other managers, however, were explicit in their praise for the more senior level support received. In Aberdeen, one line manager singled out a former HR Manager, as someone who had instilled a greater sense of awareness, importance and discipline in the management of people.

"I bet you that the overall survey result percentage for HR in Aberdeen is not as bad as in WesternGeco [Gatwick] - because of the way that she (former HR director) wanted HR to be managed." (A6)

At Gatwick, a respondent drew attention to the paucity of HR talent in the strategic role, and singled out an individual for particular praise:

"He [Gatwick HR manager] would be very much someone who would be interested in longer term strategies but then he was quite unusual probably in the respect of being a professional HR person, which we have few of so we were very lucky to have him working for us for a time. I've not enjoyed that kind of support I don't think from any other personnel person per say...." (G1)

This respondent also drew attention to the need for HR support which sits between the strategic and transactional levels:

"We've gone some way down that direction, because we have the personnel centre, which is some kind of call desk, dealing with transactional tasks type function, then we have fairly few HR managers and I don't know how common it is but we've had a few people who are a little bit half-way in between. I mentioned Barbara earlier, who does help me on the day

to day people-oriented tasks but it's through their experience and advice that those people can offer.... there's definitely a need for them, they sort of sit half way between the two."
(G1)

5.5.5 Perception of e-HR Tools

This section examines the interview accounts for perceptions of the research participants – their knowledge, views, understandings and experiences – towards the use and usefulness of the e-HR tools.

As identified in the literature review, credible research data on this topic is rather thin on the ground, with a number of authors, notably Lawler & Mohrman (2003), Gueutal & Stone (2005), Florkowski & Olivas-Lujan (2006) calling for more research in this area.

The categories are based on an amalgam of the literature and the areas probed in the survey.

Access

This refers to the ability of line managers to gain access to the web-based tools, either through the company intranet or the internet. Only one respondent (A3) explicitly stated "*I think the access to them is good here in Aberdeen,*" and there were no dissenting voices amongst the Aberdeen population.

In the case of Gatwick, it was claimed that many of the line managers were out-placed from their office and physically located on client sites in order to do their work. The suggestion was that in those instances it caused potential connectivity issues, with impaired access to the e-HR tools:

"They (Gatwick managers) are very much isolated as individuals...they're not on the Schlumberger network...so if they need to get to any of the tools or HR stuff that's on line, they need to dial in and get it and the connection's not as good and it's not as quick.." (A3)

However, there appears to be no evidence to suggest that access via the company intranet or internet is a significant factor in influencing the perception of the e-HR tools.

Ease of Use

The majority of respondents had some view in terms of the ease of use of the tools, ranging from high praise to high criticism. For example, respondents A1, A2 and A3 express highly favourable opinions about the career centre and performance management tools:

"[Career Centre] It's very good, it's very practical, it's very, very easy to use, it has to be easy to use because if you want to go back to the negative and talk about it, nobody ever got any training on it, so you know everybody who's using it has basically picked it up for themselves...the majority." (A1

"the career centre, is very easy to navigate and I use it quite frequently, so again, it's probably just a case of how frequently you use these tools". (A2)

"I think pretty much every manager will understand the Career Centre and Performance Data. They're easy to get to, they're easy to understand, they're easy to manage and maintain and all managers have a lot of access to both of those on a regular basis." (A3)

By way of counterbalance, however, other views were expressed by line managers concerning the use of the SAP tool, which was found to be very unintuitive and very difficult to use. For example, line manager A3, who had been very positive in comments about the Career Centre, was quite condemnatory about SAP.

"I find using SAP and the Manager's Desk Top very unintuitive and very difficult and I'm sure that most of the time I go to Personnel to ask for the answer, where I could get the information myself." (A3)

This opinion was echoed by line managers A2 and A6:

"I suspect it is the same for most people... simple data extraction [from SAP] seems very difficult." (A2)

"One of the obvious issues that we had in Schlumberger with our current HR system [SAP] is the user friendliness of the system; even to extract a personnel listing, a simple list of everybody who works with you, is not that straightforward." (A6)

The overall impression gained is that the Schlumberger designed tools – Career Centre and Performance Management – are a good deal easier to use than the SAP derived tools. But line manager A6 did comment that:

“...sometimes the only criticism of the Schlumberger tools.....is there are some things at a lower level for some of the guys; there aren't the selections they would like to make.the guys who are just starting and you tell them to fill out their career network profile, they're not really sure what to put in there.”

This suggests that a lack of familiarity with a tool, even one which is otherwise perceived to be intuitive, can cause some operational issues. This point is supported by manager G1 when talking about Employee and Manager Hubs:

“I think they're intuitive web sites from what I've seen but again I'm not sure that they've been advertised widely. I'm not sure how many people, if we ask how many people in the building knew about employee hub.....”

Usefulness to Managers

This refers to how useful line managers perceived the e-HR tools to be in helping them to perform their role. An interesting spectrum of views were presented, some in stoic support of the tools and others highlighting significant deficiencies that would need attention.

Already favourably cited for its ease of use, the career centre also attracted strong praise for its usefulness in a number of areas:

“I think the Career Centre is very good in that we have the ability to look and find people in their particular skills sets through a system. I think it gives the company a good starting point to find or fill the varied opportunities that we have throughout the world.” (G1)

“I've been with Schlumberger for 24 years now and I can remember when we used to have to do performance appraisals, for example, on a piece of paper and try and find that piece of paper a week later, never mind a year later, you know it was non-existent so by having the electronic career centre to manage personal appraisals is absolutely first class. I mean, how we would do without it today, I've got no idea.” (A1)

The same manager also claimed that *"...it's got a useful part to play in the redundancy process as well; you only have to look at redundancy by performance, then it's all there."*

Data Quality

Data quality refers to line manager perceptions of how HR data is managed and audited. Some interesting perspectives were revealed through the interviews.

The presentation of findings in other categories, such as 'ease of use' and 'usefulness' made inferences about data quality. For example, interviewee A6, when speaking about the importance of being able to access accurate performance records of team members, argued that you can *"have the confidence that you can go back to your desk, pull up their records and.....access the information that you want about people."*

Other examples of data quality set out below concern perceptions of accuracy and whether managers and employees should be personally accountable for maintaining their personal and team data. The role of HR in the auditing process is also examined.

Manager A4, who had raised concerns about the usefulness of the e-HR tools in relation to the business needs of the organisation, also cautions against total reliance on the accuracy of personal data held on the systems:

"The question is if people are just looking at the personal data as being true because it is there on the computers that creates difficulties.....I don't make money for the company; I don't manage people properly only by looking at personal data. Sometimes it is needed, but there are a lot of things we are supposed to do.

"Yes, the ability to audit the data is very powerful for the personnel department, for the HR department, but as a Manager, it really doesn't mean much to me. What I want to see obviously is properly populated information and believe it or not, people will tend to give the right information about themselves, but perhaps the piece that gets messed up is when administrators plug it into the system."

The respondent then goes on to say that data accuracy is not absolutely critical to the enactment of day to day decisions, so the importance of data maintenance appeared to be lessened.

"In the UK, well.....a lot of the data needs to be cleaned up. But as a Manager, this is not my nightmare, I can tell you that. I look at the tools in a very positive way because they make my life easier, much easier and especially if you are able to tell the comparison between now before we had those systems in place and with a bit of special involvement that I have, I think I can do more than the average manager can do with their HR system."

(A8)

Others also had mixed opinions about the ownership of the data residing with HR. One interviewee (G1) thought that the management of data quality should be vested in the HR function until a point is reached where you could virtually guarantee that employees and managers could be trusted to keep their data accurate:

"I think I would find this difficult because....I know my own ability to keep data up-to-date and to work on a task in a timely fashion and the ability isn't high but with HR, who are paid to do these things, actually holding the keys to the trusted database, I find quite comforting."

"In an ideal world where I could guarantee that 99.9% of people would keep everything up-to-date, then I'd be quite happy to hand it over to line managers and employees, but the reality is such that I don't think that's the right idea."

Another example of the importance of accurate performance data was articulated by (A5):

"So for the performance data, obviously the sheer power of being able to see your staff performance over say the last 3 or 4 years and observe how well they've been doing at the click of a button; it's just fantastic, compared to previously where it was a case of 'who you know'."

5.6 Critical Reflection

The application of quantitative and qualitative techniques appeared to work quite well. The survey presented some interesting findings that were then revealed to line managers to elicit their reactions. I felt the small representation from Gatwick was a draw back, especially as one of the managers had virtually nothing to say.

What this approach does, I believe, is to provide illustrations of positive and negative outcomes of the e-HR implementation, which can be attributed, at least in part to the difference in the contexts of the two subsidiaries; At Aberdeen there was a receptive context for change in the form of a longer history of integration into the corporate culture, a higher ratio of HR business partners and an apparently positive experience of previous e-HR tools; at Gatwick the context was of a recently acquired company, lack of cultural or corporate integration, diffused organization structure, recent experience of redundancies and a scepticism over HR's role in supporting employees and managers.

What this suggests is that organisations need to be more cognisant of their organizational context when implementing e-HR. This refers to the institutional and cultural distance between the parent company and the subsidiaries, the attitudes of managers to learning and change, and compatibility of practices between the parent and subsidiary companies and (b) the relational context, which refers to the attitudes of the parent company managers to subsidiary managers and employees and the dependence of the subsidiaries on the parent company for resources.

It is possible to have some understanding from this case of organizational contextual differences and on the attitudes of the parent company to the subsidiaries; however, one of the limitations of the research is the lack of data shedding light on the differences in dependence on these subsidiaries on the parent for survival, though it is possible to speculate on this from the redundancy context at Gatwick.

Chapter Six

Research Case Three – T- Mobile

6.1 Research Setting

Building upon the research at Cable & Wireless and Schlumberger, this final piece of case research took place in the UK based subsidiary of one of the largest mobile phone companies in the world, T Mobile, itself a wholly owned subsidiary of Deutsche Telekom AG. I was able to gain access to the organization through my associations with a third party - Morse PLC - a company that had provided technology consultancy services to T-Mobile in the past.

The research took place between July 2006 and January 2007. My internal sponsor, the HR Systems Manager at T-Mobile, agreed to be interviewed to enable me to understand in more detail the factors shaping HR strategy, e-HR goals and associated architectures. These aspects are succinctly described in the following sections and all of the quotes are attributed to that source.

The support of T-Mobile UK for the research was based on a desire to achieve a meaningful assessment of the impact of e-HR on both the HR and line manager populations, with a view to improving the HR service offering, where practicable, in the future. The organization had recently completed a major project to upgrade the Enterprise Resource Planning (ERP) software package, as the previous version had reached the end of its commercial life.

6.1.1 Essential Characteristics of T-Mobile's Parent and UK Subsidiary

Parent Organization

Deutsche Telekom AG is the largest telecommunications company in Germany and the EU. It offers its customers the entire spectrum of IT and telecommunications services from a single source. It was formed in 1996 as a result of the privatization of a former state-owned monopoly, Deutsche Bundespost.

Since its formation, Deutsche Telekom has progressively increased its presence in the global mobile communications market through organic growth and acquisition, a foundation of its stated corporate strategy which focuses on establishing high levels of customer loyalty

and the pursuance of new growth opportunities. One of the focal points of this strategy is the provision of competitively priced, innovative services in its mobile services operation, T-Mobile International, taking advantage of the new trends in mobile Internet and Web 2.0.

T-Mobile International is Deutsche Telekom's group of mobile phone corporate subsidiaries, which operates across eleven countries in Europe (including the UK) and the USA.

The parent organization has an espoused cornerstone to its strategic vision, based on quality, innovation and efficiency, which it describes as the 'binding element' for the whole group. Underpinning the vision, the parent has six principal corporate values, which can be systematically derived from the individual letters in the word 'SPIRIT':

Superior Value: "We constantly enhance the value of Deutsche Telekom".

Passion for our Customers: "We delight our customers by providing them with excellent products and services".

Innovation: "We create a culture of innovation in which we enjoy working".

Respect: "We benefit from our cultural diversity, respect and help each other".

Integrity: "We communicate in an open and honest way and deliver what we promise".

Top Excellence: "We think and act resolutely and strive constantly for greater efficiency with the right people in the right jobs. We consistently reward performance while taking action against misconduct".

(Source: Deutsche Telekom corporate website www.telekom.com)

Subsidiary Organization

T-Mobile UK was created following Deutsche Telekom's acquisition of the One-2-One mobile communications from Cable & Wireless and its subsequent re-branding in 2002. With headquarters in Hatfield in Hertfordshire, it has become established as one of the UK's leading mobile communications operators, and is one of the largest businesses within T-Mobile International.

Following its acquisition, the subsidiary was expected to translate the corporate vision and strategy of the parent into a UK context. This created a number of tensions and challenges, not least overt pressure from the parent to hasten 'technical integration' of the subsidiary's systems, and to conform to strict reporting requirements. The 'quality, innovation and efficiency' agenda, described as the "binding element" between the parent and its

subsidiaries, also created obligations on T-Mobile UK to attend urgently to cost control, product innovation and workforce productivity.

6.1.2 T-Mobile UK HR Strategy

Thus, given these pressures, the HR function adopted a strategy with an immediate aim to create technical integration within the UK business and with the parent, and improving reporting of key HR metrics. *“At that point we were utilising Peterborough software, we were fairly ‘stand alone’ with the Peterborough software system, and it wasn’t running that well for us. The reporting side was quite difficult. The HR Director made a decision at this point to move to SAP.”*

Subsequent considerations turned to reshaping the function, and the *“initial impetus was to create a shared service centre, but we couldn’t fully pull away processes from the [remote] sites, because we have three call centres. Where we are now is more processes have been pulled into the centre....the admin team has more or less today the same numbers although the workload has vastly increased, so I would say we’re partially towards a shared service centre”* Linked to these initiatives, business partners were created in a move which sought to transform the HR function, *although “we have only partially transformed due to the capability of the individuals within the Business Partner team, their role shifts between strategic and transactional”*

Finally, e-HR services were introduced, using the new SAP technology platform in tandem with a modified HR portal.

6.1.3 e-HR Goals

The primary goal of HR systems and e-HR was seen as *‘....the driver to achieving a strategic HR department.’* This was enacted in a series of developments encompassing improved technical integration within the UK business and the parent organisation, and the creation of an HR portal through which managers and employees could access web-based services. Interestingly, however, cost savings through the leaning of HR itself were not an important consideration as *“the financial justification was based around reducing the number of interfaces we would have to build if we remained with Peterborough Software, consolidating management information requirements i.e. eliminating the need for multiple warehouses and duplicate reporting efforts, and leveraging the existing SAP hardware.”*

6.1.4 e-HR Architectures

These goals were met firstly by introducing a new SAP HRIS, part of a wider ERP implementation. The primary motivation was to create improved technical systems integration within the UK subsidiary and with the parent organization. *"We had a system that didn't seem to have that many automated interfaces so at the time we were pulling off, you know, sort of 30, 40 reports for the business, pushing those out. So we had strategic business drivers, but really our driving force behind it [adoption of SAP HR], I would have said, was integration. This created more timely and accurate reporting of HR metrics and "...provided an immediate platform for the delivery of ESS/MSS which supported the HR Director's goal of a strategic HR Department."*

The development and implementation of different applications to enhance the scale and reach of e-HR applications evolved from early adoption of 'personal administration', a very simple form of employee self-service, and 'training and administration', *"because at the time there was no training administration system. We had just implemented a small web-based system that ran from our intranet but obviously there were no links with anything else."*

This was followed by 'organisational management,' which meant configuring the entire organizational structure into SAP. The intent here was to allow managers based in Germany to be able to view, on line, the details of team members from the UK. This was an example of the closer integration with the parent organization, but it was admitted that *"it still doesn't work particularly well for individuals who manage employees in different countries, and we still have many issues."* The move to organisational management also facilitated workflow, such that *"things like booking annual leave is totally an employee-to-manager activity [within the system]."*

More sophisticated applications followed, such as 'People Click', an externally sourced, e-recruitment system. The HR function had *"wanted to link PeopleClick to SAP but that never happened.....We've done something just recently but it's not that good. That was very much in our vision at that time, but that's not really been achievable...."*

Other developments followed, as HR attempted to become more customer-centric, in what was described as a "big value add programme" utilizing a "three pronged attack." The first stage involved re-badging the HR intranet site to create a new portal called 'HR Direct'. At the same time, HR policies were changed to become questions-based, as opposed to simply publishing the policy text on line. Secondly, 24@TMobile was established which, *"for the*

first time... enabled us to have a central e-mail address and then all the questions coming via e-mail to HR would be answered and tracked on the system. We can do analysis in terms of what topics are coming in and then we can go back to HR Direct and start to update that and say, 'OK, where do we need to go?'"

The third stage involved creating more self-service functionality through manager and employee self-service. These were predominantly 'out of the box' features such as e-performance management, career management and flexible benefits. It was recognised, however, that *"we want to go forward by fully integrating.....our bonus system back through to personal development and link that through to e-learning - that's where the real breakthrough will happen."*

Surrounding these developments, T-Mobile UK had to manage tensions with the corporate parent concerning the adoption of a UK centric HR portal design, rather than using an international portal – an attempt by the parent to bring cohesion amongst the different operating companies. The German parent had also raised concerns about the UK subsidiary's willingness to provide HR call centre support for line manager queries:

"At the moment we are using our HR admin staff to answer the queries from 24@T-Mobile. I think we need to; however the Germans are of the view that it can just be e-mail. I think we feel that we also want to give customers the opportunity to use the telephone as well; we're a mobile 'phone company for goodness sake. But obviously that's a different mind set."

6.2 Data Sources

The data were collected from two main sources: a web-based, 'point and click' survey, which also allowed free text responses followed by in-depth, semi-structured focus group interviews, each one lasting about one and a half hours. The data sources are summarized in Table 8.

The figures shown represent the total number of line managers and HR managers responding to the survey. The response level is the overall response level, as it was not possible to delineate the HR and line manager populations within the target sample when the invitations were sent out.

Table 8: T-Mobile Survey Data Sources

Organization	Interviews	Web-based Survey	Response Level
T Mobile UK	Line managers (15)	64 line managers 5 HR managers	73%
Totals	15	69	

6.3 Analysis of Survey Data

The full list of survey statements can be found in Appendix 3.

The following sections dissect the data in various ways with the aim of producing interpretations that help to shape an understanding of perceptions of e-HR outcomes. As in the previous case, it is acknowledged upfront that this analysis is not exhaustive, in terms of establishing every conceivable relationship between items. The initial data capture via the survey involved a relatively small sample (particularly in respect of HR managers) and did not lend itself to complex statistical analysis. However, this does not detract from the intent behind the survey, which was to inform the interview process. I was not setting out to develop my central arguments purely on the basis of the statistical treatment of the survey data.

6.3.1 First Pass Analysis Based on Favourability

Composite Comparisons

Table 9 provides a summary of the results of the survey on three categories: 'e-HR tools, their Perceived Value and Ease of Use' (Dimension 1); Data Quality and Maintenance (Dimension 2) and 'Change Communications, HR Support and Training for e-HR' (Dimension 3). These categories are derived from the objectives agreed with the internal sponsor of the survey. They also formed the basis of the report produced for the internal sponsor, and guidance notes sent to line managers in advance of focus group interviews - also see section 3.6.1.

The results are based on a simple aggregation of percentage of favourable or positive responses to each of the questions corresponding to the three dimensions. The favourable percentages combine the favourable/agree and very favourable/strongly agree scores; the middle percentage represents neutral scores, while the unfavourable percentages combine the unfavourable/disagree and highly unfavourable/strongly disagree scores.

Table 9: Results of T-Mobile Web-Based Survey among HR and Line Managers on e-HR

Dimension	Aggregate responses %			Line Manager responses %			HR Manager responses %		
	F	N	U	F	N	U	F	N	U
1	54	24	22	53	24	23	69	24	7
2	73	13	14	71	14	15	90	8	2
3	45	28	27	44	27	29	60	37	3

Note: For each category above, the respondent population was almost entirely composed of predominantly office based managers with between 2 and 10 + years of service.

The composite comparisons show that *overall* the respondents were favourable or positive in two of the three categories. They also indicate that HR managers exhibit more favourable perception than their line manager counterparts within all the categories selected.

Examining these dimensions in more detail, it is possible to identify the individual items that received most favourable (positive) and unfavourable (negative) coverage.

6.3.2 Analysis based on mean scores

To examine the results in more detail, the scores for each item are calculated on the basis of mean values and compared by rank and extremes (see Appendix 3 for mean values of all statements).

Overall Comparison of HR and Line Managers

There were 52 statements with means for both HR and line managers. The mean for HR managers was more positive than the mean for line managers in respect of 46 statements and less positive than line managers for six statements. The sign test for the equality of less and more positive has a p value of 0.0000, which supports a conclusion that the responses for HR managers are more positive than for line managers, consistent with the observation previously made in the favourability comparisons.

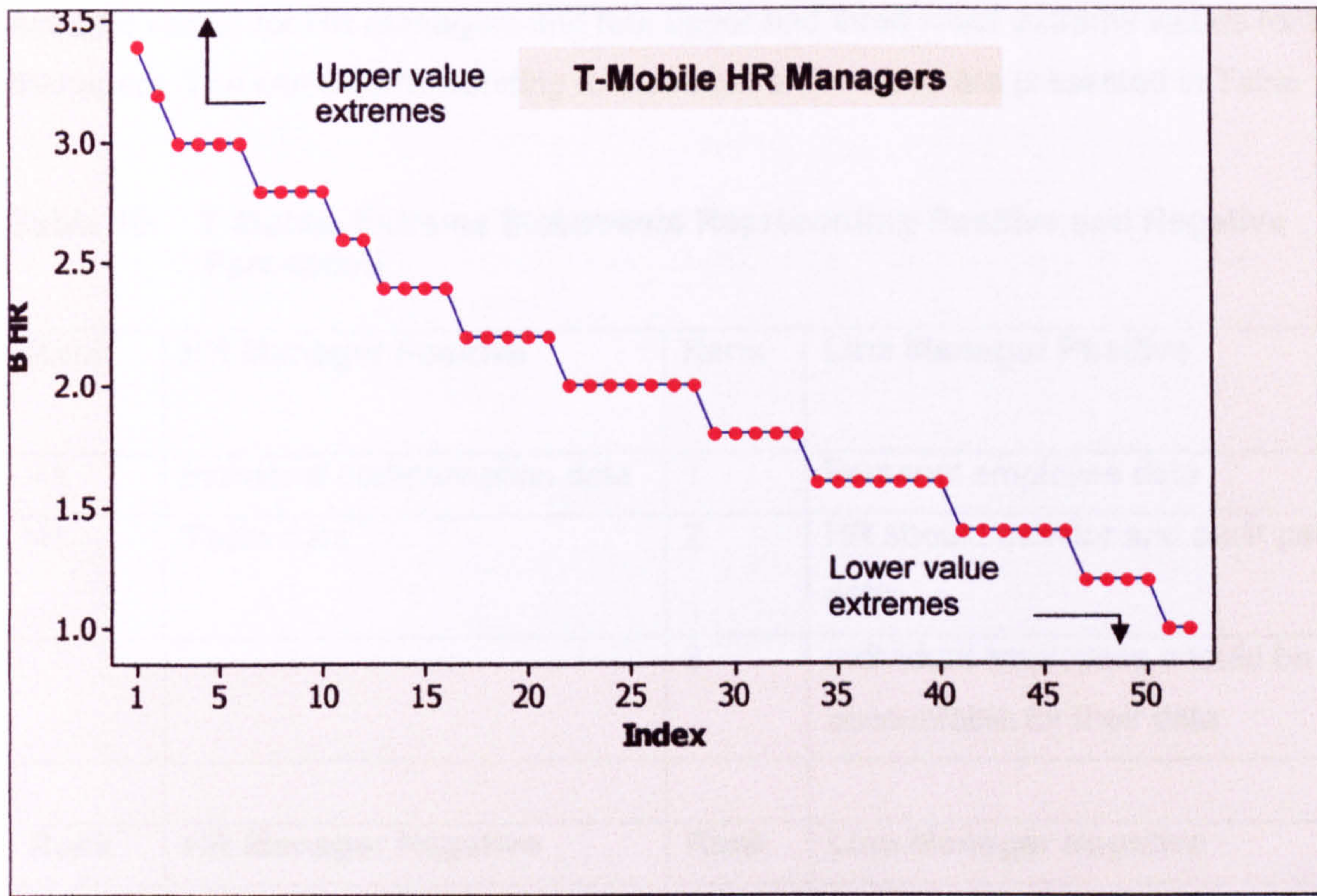
Comparing the Rank Order of Statements

The rank orders of the statements for HR and line managers (see Appendix 3) were compared using Spearman's Rank Correlation Coefficient, which produced a value of 0.664. The p value when testing for a positive rank correlation coefficient is less than 0.01. Hence it can be concluded that the two samples are in agreement in that both HR and line managers display highly similar rank orders. This means that both HR and line manager populations responded to the survey items in a very similar fashion, from a rank perspective.

Identifying Extreme Statements for HR and Line Managers

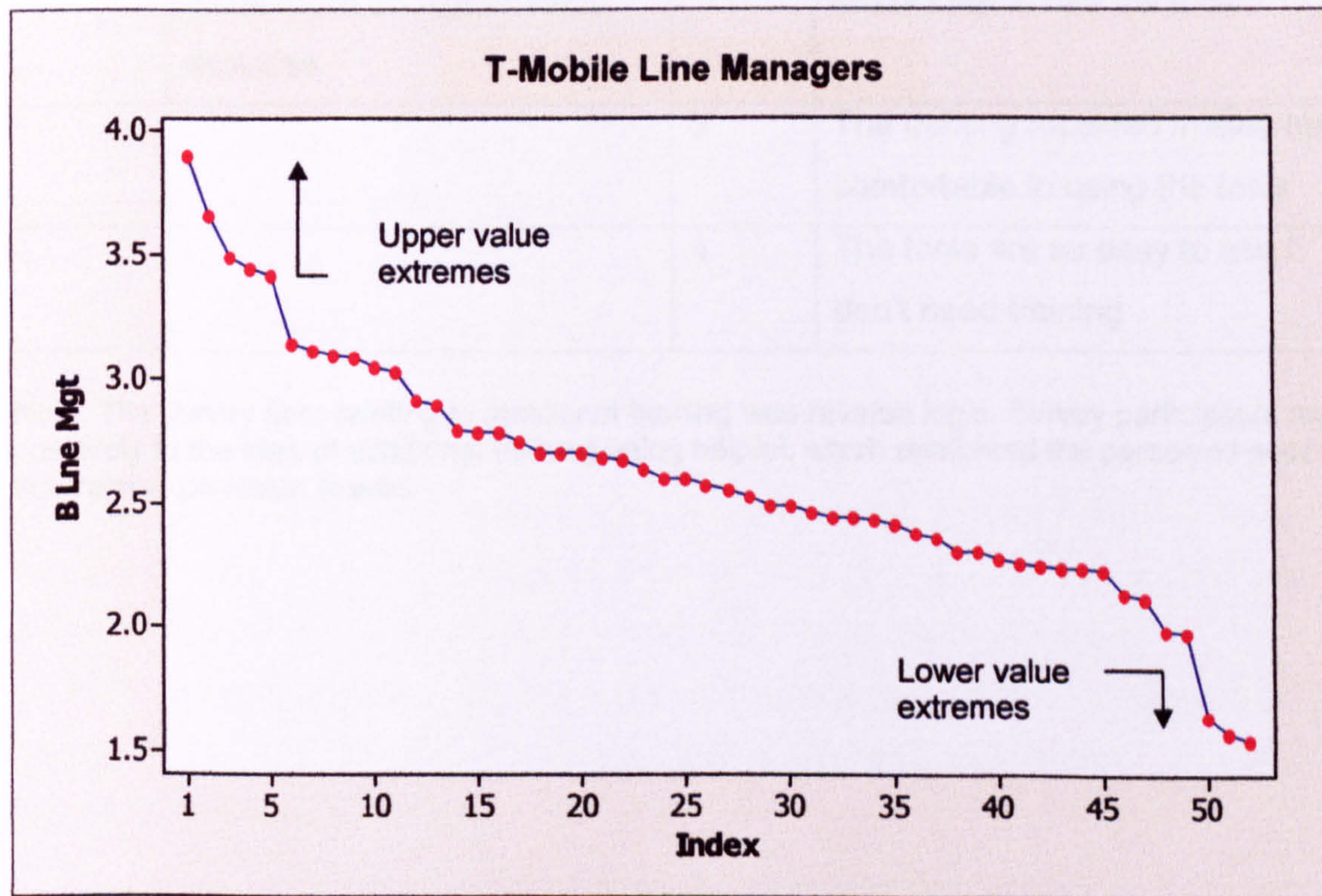
Scree plots of the mean scores are presented in Figures 18 and 19. The plot for HR is a series of steep drops and suffers from the problems highlighted by Hayton et al. (2004, p 193) in that *"....it suffers from subjectivity and ambiguity, especially where there are either no clear breaks or two or more apparent breaks. Definite breaks are less likely with smaller sample sizes and when the ratio of variables to factors is low."*

Figure 18: Scree Plot of T-Mobile HR Manager Mean Scores



Note: B-HR, Mean scores for T-Mobile HR Managers; Index, diminishing series

Figure 19: Scree Plot of T-Mobile Line Manager Mean Scores



Note: B Line Mgt, Mean scores for T-Mobile Line Managers; Index, diminishing series

My interpretation of the range of extreme values, informed by the scree test, are shown on the respective plots for HR and line managers. I have identified two upper and lower extreme values for HR managers and four upper and three lower extreme values for line managers. The items corresponding to those extreme values are presented in Table 10.

Table 10: T-Mobile Extreme Statements Representing Positive and Negative Perception

Rank	HR Manager Positive	Rank	Line Manager Positive
=1	Individual compensation data	1	Personal employee data
=1	Team data	2	HR should monitor and audit personal data
		3	Individual employees should be held accountable for their data
Rank	HR Manager Negative	Rank	Line Manager Negative
1	Even with e-HR, I have to spend too much time on administration	1	Additional training would be helpful
2	e-HR allows the function to focus more on higher value activities	2	I received sufficient initial training to enable me to use the tools
		3	The training received makes me comfortable in using the tools
		4	The tools are so easy to use I don't need training

Note: The survey item relating to additional training was reverse logic. Survey participants responded positively to the idea of additional training being helpful, which reinforced the perceived poor state of the training provision overall.

Analysis of Extreme Positive Responses

The statistical breakdown shows that all of the extreme values for the HR and line manager populations are associated with a positive perception of the quality of data and the need for data to be maintained through HR audit and individual responsibility.

An examination of the free text responses in Appendix 7 reveals nothing in the way of explicit favourable comment to support the statistical analysis of the survey item data. Quite the contrary; for example, comment 9 asserts that: *"Processes for recruitment, new employees, changing roles, departments, secondments and leavers all need significant enhancements to safeguard the quality of the data"* Another respondent makes the point that: *"Improved team data reporting would be helpful and also the ability to maintain next of kin and emergency details on in Employee Self-Service."* (comment 23)

These negative sentiments are not isolated; in fact, the majority of the free text comments point directly or indirectly to concerns and frustrations with e-HR. However, there are some supportive comments. One manager (comment 18) says, *"I agree that having an online e-HR is definitely helpful to the business as most information relating to policy and procedures is available online"* and another (comment 21) reports that *"HR Direct, 24@t-mobile, L&D stuff is excellent."*

Analysis of Extreme Negative Responses

The statistical breakdown shows that all of the extreme negative responses for the line manager respondents are associated with concerns about the adequacy of the training. The HR population shows extreme negative responses towards what appears to be a preoccupation with administrative tasks that impact the ability for HR to focus on more strategic issues.

There is evidence available in the survey free text responses to substantiate the concerns about training. One manager (comment 18) claims that: *"I feel the training given on usage of SAP was very limited as we don't tend to use SAP frequently - it would be useful to have an online supporting procedure to demonstrate how to use it for future reference."* Another manager (comment 10) makes the point, *"Still sometimes use HR when I am not too sure, perhaps more training required."*

Concerns about training and the lack of an intuitive HR portal are raised by another manager (comment 3):

"I would personally benefit from some basic training to both make me aware of and introduce me to the e-HR tools available. In general a central and more intuitive "Portal" for all HR activities would be useful."

The reference to the HR portal reflects other criticisms and concerns revealed in the free text responses which are associated with matters beyond the survey items in Table 10. For example, one manager (comment 4) makes the point that *"the e-HR functionality is just too difficult to use. It is not intuitive. Finding the right policies, lists of training courses etc, is just not easy, and as often as not, once found the information is out of date. The business partners in HR are very good at their jobs and tend to cover this shortfall but it is can't be an efficient way for the company to run."*

Another manager remarks (comment 11):

"SAP is not the best user friendly tool and is more problematic ending up taking far too long to perform activities. Peopleclick does not often give all the information you require regarding candidates or requisitions, so you end up chasing to find out information when it should be available at the click of a button. There could be improvements both to the level/amount of information available and also performance as neither tool is extremely user friendly."

These sorts of concerns also seem to spill over into wider concerns about the potential leaning of HR, when e-HR is introduced. For example, one manager (comment 15) boldly states:

"Be vocal about the truth - one of the guiding principles that seems mostly to be forgotten by HR HR needs to be more involved in the day-to-day activities to understand what is happening in business but with e-HR they only remove themselves further from the problem."

Another manager (comment 19) makes a related point:

"The need for personnel onsite is essential as they provide the support we need when making decisions on disciplinaries and grievances, and they provide fantastic

guidance....If personnel was to be reduced, it would be absolutely necessary to provide cover online or via telephone from HR personnel when conducting disciplinaries etc during contact centre opening hours..."

6.4 Discussion

The analysis raises a number of interesting points, in particular the differences exposed between the HR and line manager communities in their perception of e-HR. The limitations of the sample are recognised from a statistical perspective but nonetheless provide an informative guide to explore e-HR in more detail through interview. Thus, the following items represent a distillation of the analysis for that purpose:

- 1. Recognition that the results of the survey carry positive messages but also highlight areas of concern that need to be addressed.**
- 2. There are clear indications that data quality supplied by e-HR applications is viewed positively by the line management population as a whole. Also, there is agreement that the line managers value the data audit role of HR, to assure data quality and also support the notion that individuals should maintain their personal data.**
- 3. Communication and support issues dominate the line managers' negative perceptions.**
- 4. Lack of intuitive operation of the e-HR tools and the potential alienation of the HR function also attract negative perception from line managers.**
- 5. The HR community is more cognisant of the benefits of e-HR overall, but it is also evident that it feels too heavily burdened with administration and unable to release its potential in higher value-adding roles.**

After a discussion with the internal sponsor of the research, I was given permission to approach the respondents who had voluntarily given their names in the survey tool, by way of focus groups. The methodological justification for this approach was explained in Chapter Three and the details for this phase of the research are now set out in section 6.5.

6.5 Focus Group Interviews

The methodological basis for conducting interviews was fully described in Chapter Three. As previously stated, three focus groups were undertaken. The first two groups comprised three people and the last one had nine.

These were all managers who had expressed an interest in being contacted for follow up interview after the survey. The participants did not mind having their identities disclosed to an internal member of staff who arranged the logistics of the meetings.

As with the Schlumberger case, the topic guide provided the basis for the focus group discussions and informed the template used for subsequent analysis. Transcripts of all the interviews were produced and sent to the participants for validation. No comments or modifications were forthcoming.

Chapter 7

Towards a Theoretical Framework Linking HR Strategy and e-HR Outcomes

7.1 Introduction

The theoretical background to e-HR reviewed in this thesis and the research cases exploring the perception of e-HR outcomes in the UK subsidiaries of three global organizations are used to inform the development of a theoretical model linking HR strategy and e-HR outcomes.

First, an overview of the literature informs the theoretical background. Relevant evidence from the literature is combined with the case research findings to produce a new perspective on e-HR outcomes.

The factors giving rise to these outcomes are discussed and used to inform, and partially confirm, other aspects of the framework.

The discussion examines the theoretical and practical value of the framework.

7.2 Review and Elaboration of Theory Concerning e-HR Adoption

The literature review has given some insights into how the contemporary HR function in for-profit and not-for-profit organizations faces a number of competing challenges, so creating ambiguities and tensions in what it delivers, how it delivers, how effectively it delivers, and to whom it delivers (Lepak & Snell, 1998; Snell, Stueber & Lepak, 2001; Galliers & Newell, 2003; Ulrich & Brockbank, 2005; Bell et al, 2006; Reddington, Martin & Alexander, 2008).

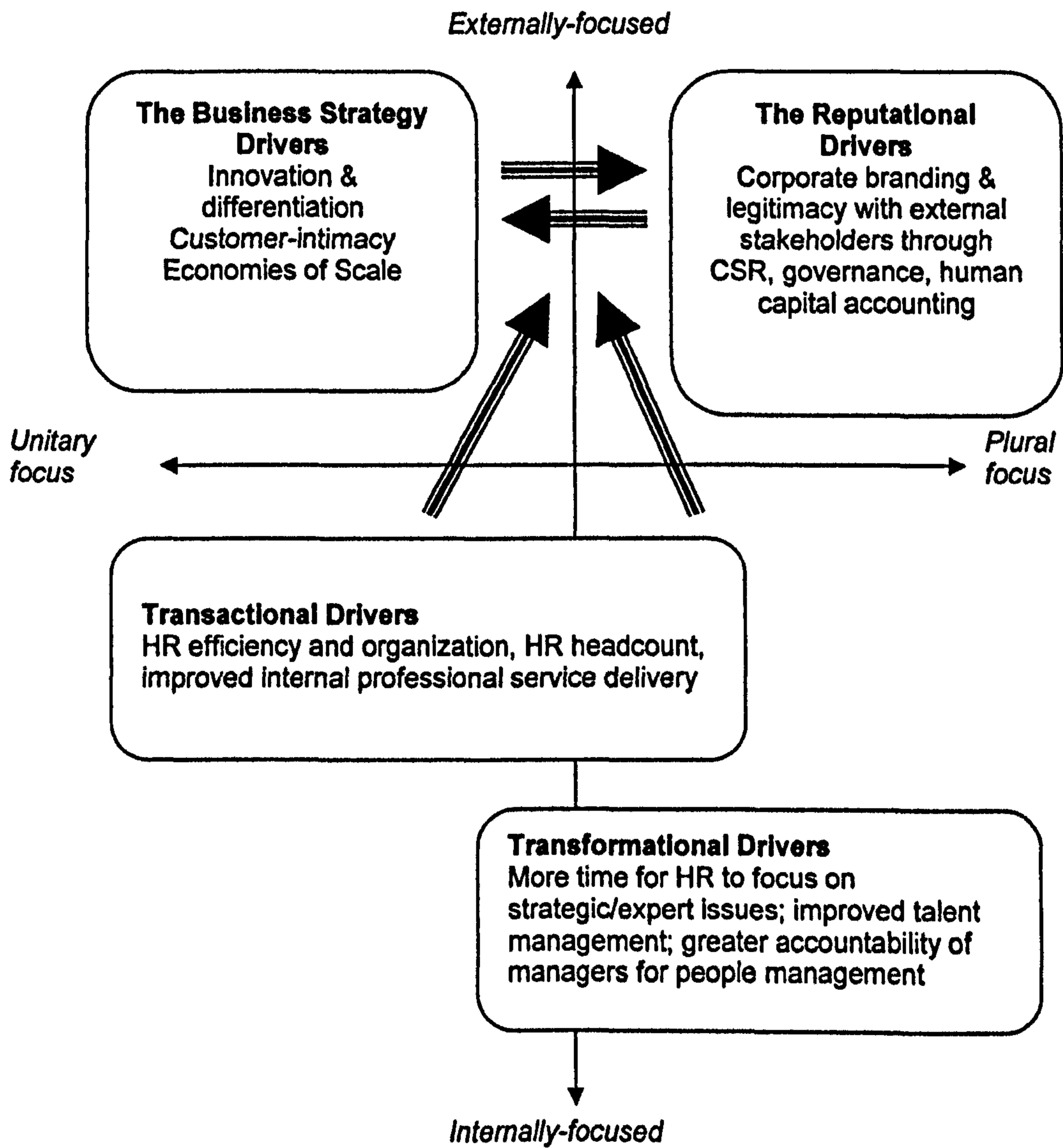
My reflections on the literature reveal that the tensions underlying these challenges capture two distinctive and often divergent sets of pressures on organizations. The first set is the *external versus internal pulls* that exercise the minds of managers, often embedded in the distinction between operational and strategic management. The second set relates to the goals of strategic or operational activity inside an organization - whether these are principally aimed at satisfying unitary objectives, associated with the concept of shareholder value, or whether these are more plural in nature (Paauwe, 2004; Whittington, 2000),

associated with the notion of stakeholder management and with modern forms of networked organizations. These dimensions, related orthogonally, produce a matrix that helps us understand how contemporary HR management teams in a number of organizations have developed a set of interrelated, *transactional* and *transformational* strategies to meet the *external* challenges set by the business strategies of modern organizations and the longer-term branding and reputational drivers (Martin & Hetrick, 2006; Reilly & Tamkin, 2006) – see Figure 20. Note that I have conflated the *operational* and *relational* characteristics of HR services identified by Lepak and Snell (1998) and Snell, Stueber and Lepak (2002) into the category of *transactional*, as the former relate to efficiencies and service level improvements in transactional dealings with HR.

The *HR strategies* embrace the internal drivers in Figure 20 and reflect “how the organization regards its human resources, what role the resources play in the overall success of the business, and how they are to be treated and managed. This statement is typically very general, thus allowing interpretation at more specific levels of action within an organization” (Schuler, 1992, p 21).

To deliver HR strategy, firms typically respond with a mix of re-organization of the HR function itself and new information technology approaches. The re-organization of the HR function involves new HR delivery models, often based on a tri-partite model of shared services, centres of excellence and strategic or business partnering) along the lines recommended by Ulrich & Brockbank (2005) with *outsourcing* and, in some cases, *off-shoring* of key services, especially shared service centres (CIPD, 2005; Cooke, 2006; Reddington, Williamson & Withers, 2005). The introduction of information technology, often in combination with new HR delivery models can rationalize or transform HR's internal operations (CIPD, 2005b; Gueutal & Stone, 2005; Martin, 2005; Shrivastava & Shaw, 2004).

Figure 20: Competing Claims on HR and their Relationships (adapted from Martin, Reddington & Alexander, 2008)



It should be emphasized at the outset that these organizational, process re-engineering and technological solutions are interdependent (Keebler, 2001). Without progressively sophisticated IT, new HR delivery models would not be as effective: indeed it is the increased reach and richness of IT-enabled information and organizational learning that have facilitated simultaneous centralization and delegation of decision-making in HR, the single most important claimed distinctive capability of new HR delivery models (Ulrich & Brockbank, 2005). And, according to some academics and leading practitioners, one of the logical consequences of these developments is the potential 'virtualization' or, at least, significant 'leaning' of HR (Keebler, 2001; Reilly & Tamkin, 2006; Snell, et al, 2001). This virtualization results from simultaneously reducing the numbers of specialists required to deliver HR services internally while improving the quality of these same services and developing new HR business models for innovative organizations (Taylor & LaBarre, 2006).

Given the potential for virtualization, a useful starting point is to see e-HR as a key element of e-business in the form of the 'virtual value chain', this time with a focus on the inside rather than outside of the firm (Rayport & Sviokla, 1995). The virtual value chain is considered as a set of processes that turn raw information into new virtual services and products through transaction cost compression, the law of digital assets, and virtual markets. By creating a virtual value chain of relevant HR data, rich information can be quickly accessed, ordered, synthesized, distributed and shared by key decision makers, eliminating geographical boundaries (Evans and Wurster, 1997; Amit and Zott, 2001). With easy access to information and report generating tools, managers get HR overviews that give new perspectives for HR analysis and decision making. Further, organizations that create value with digital assets can produce them through a potentially unlimited number of transactions. For example, e-HR can be used to transform tacit into synthesized explicit knowledge in accessible digitalized data bases and to support rapid organizational learning.

Therefore, by creating added value for managers and employees through more effective information flows in its 'marketspace', HR can claim to create competitive advantage and align the function more closely with business/corporate strategy and the longer-term branding and reputational aims of organizations. However, the challenge facing organizations is not whether they use e-HR or whether e-HR has a strategic potential, but how to deploy and adopt it in a way that creates value.

To address this challenge, this chapter is primarily concerned with elaborating recent research which supports overall theoretical frameworks for e-HR adoption and its associated outcomes. This is borne from the recognition that there continues to be a lack of recent

research in this area, although some notable exceptions are Shrivastava and Shaw's (2004) stage model and Ruel et al (2004) who made use of the 'Harvard' model of HRM developed by Beer et al (1984) to link e-HR to HR outcomes.

The model draws upon the extant literature for e-HR adoption and shows four central elements – *HR strategies*, *e-HR goals*, *e-HR architectures* and *e-HR outcomes*. In effect, this creates a 'line of sight' between the adopted HR strategies of an organization and the e-HR outcomes. The moderating elements reflect the changing and dynamic nature of the phenomenon being studied. The primary contribution to theory elaboration is concerned with the examination of e-HR outcomes, based on my research undertaken in three UK subsidiaries of global organizations.

7.3 A model of the factors linking HR strategies and e-HR Outcomes

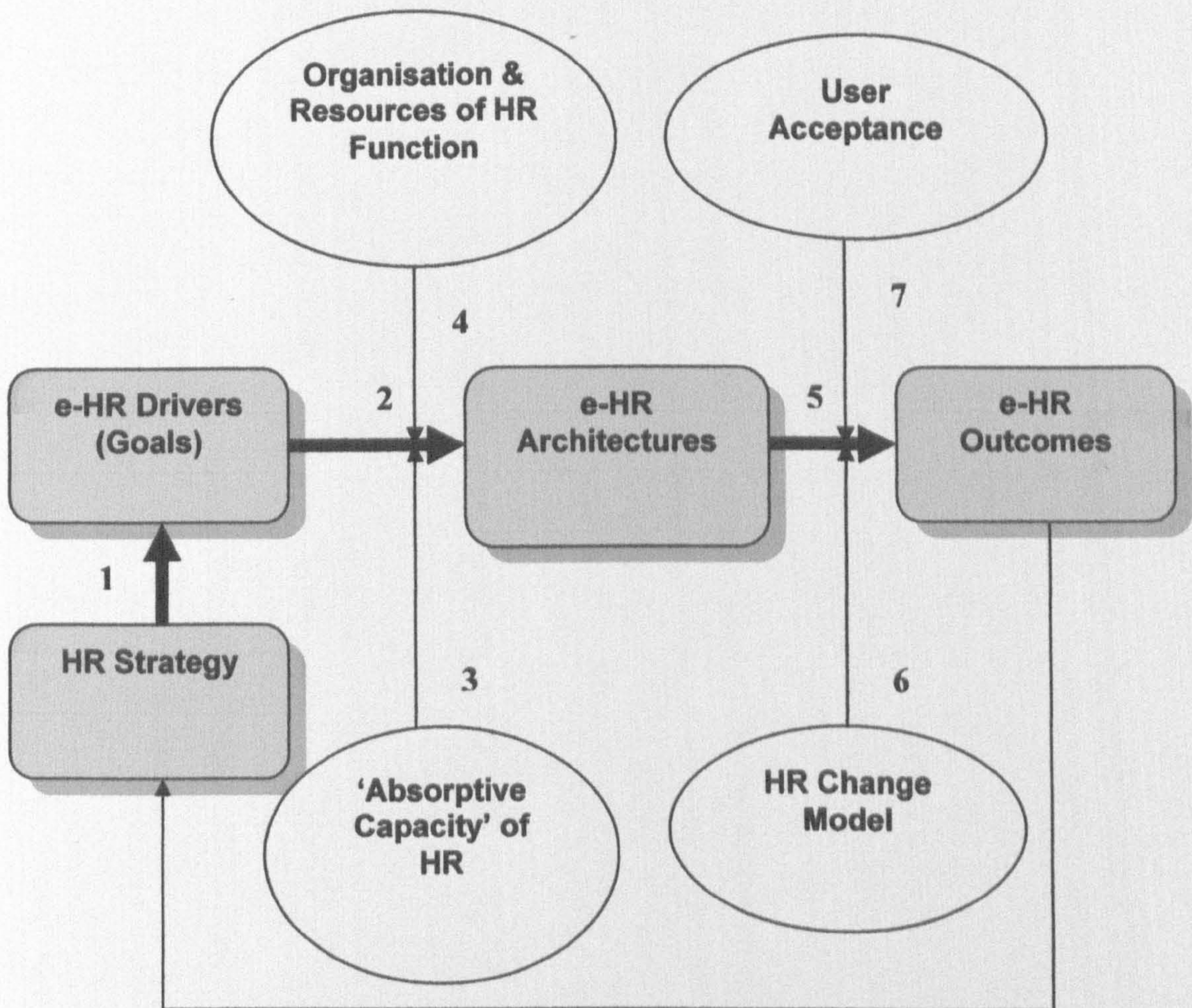
As already claimed, e-HR is one of the most important recent developments in HRM (Geueta & Stone, 2005; Lengnick-Hall & Moritz, 2003; Reilly & Tamkin, 2006; Snell et al, 2001). I have also argued that its adoption is derived from the transactional and transformational strategies that seek to address the competing claims on the HR function, which informs the starting point of the model – see Figure 21.

7.3.1 Strategic Drivers of e-HR

The strategic drivers or goals of e-HR flow from the HR strategies that have just been discussed (Relationship 1). These drivers can address HR's *transactional* or *transformational* goals (Lepak & Snell, 1998; Snell, Stueber & Lepak, 2001). The former focus on reducing the costs of HR services or improving its productivity, and improving service delivery to managers and employees; the latter focus on freeing up time for HR staff to address more strategic issues rather than basic administration, and by transforming the contributions that HR can provide to the organization (its 'business model'). The transformational goals involve extending HR's reach to more remote parts of the organization to create a sense of 'corporateness' or internal integration in extended enterprises (e.g. through HR portals); enabling more sophisticated recruitment searches (e.g. through widely available social media to uncover people not actively seeking jobs) and (self) selection through online tools; creating new forms of organizational community and methods of communications through new applications of Web 2.0, e.g. interactive employee

engagement surveys, virtual communities of practice, 'blogging' and 'wikis' (Dawson, 2008; Martin, Reddington & Kneafsey, 2008); and creating greater choice in how people work and in work-life balance through remote and virtual working (Florkowski & Olivas-Lujan, 2006; Martin, 2005; Reddington et al., 2005).

Figure 21: Illustrative Framework Linking HR Strategy with e-HR Outcomes



7.3.2 e-HR Architectures

The extent to which an organization focuses on any or all of these goals should, in theory, influence the types of e-HR architecture it adopts (Relationship 2). I have borrowed the concept of *technology architecture* from the ideas of Galliers and Newell (2003), who used the term to describe how flexible socio-IT systems can dynamically respond to changing information requirements during IT implementation projects. Thus, an e-HR architecture is a broader notion than e-HR technologies because it incorporates not only what we would traditionally consider as e-HR, which typically mean *HR data, systems and technologies*, but also how these are *sourced* and the choices made over the *human resources organization*. For example, some organizations have set up in-house shared services centres and applied e-HR solutions to them but simultaneously outsourced major applications such as pay and pensions (CIPD, 2007; Cooke, 2006).

So I define e-HR architecture in terms of three dimensions, discussed earlier in describing the e-HR value chain. The first of these draws on the classification of e-HR goals; that is whether the architecture draws on *transactional* or *transformational* technologies and skills in meeting the demands placed on the HR function. In the model, transactional technologies and skills incorporate both *operational* and *relational* aspects – the former associated with the human resource information system (HRIS) and basic IT skills; the latter associated with manager self-service (MSS) and employee self service systems (ESS) and HR portals, etc, accompanied by skills in using technology mediated HR transactions.

The transformational technologies and HR skills are associated with areas such as sophisticated search technologies, online survey tools, career development tools, human capital management systems, social software, e-learning and knowledge management platforms, virtual meetings software, etc. The second dimension relates to how these technologies and skills are sourced. As we have discussed, there is increasing use of outsourcing of e-HR to contractors, often for reasons of cost and lack of internal expertise (CIPD, 2007; Cooke, 2006; Lawler & Mohrman, 2003). How such relationships are managed and experienced by both parties can have important consequences for the outcomes of e-HR implementation. The third dimension refers to how internal and external HR-related staff and organizations interact, formally and informally, with these technologies, and their levels of existing skills and potential for developing these socio-technical systems.

7.3.3 Moderating Influences on the Adoption of e-HR Architectures

E-HR adoption will be moderated by the *absorptive capacity of HR* (Relationship 3) to seek out knowledge and exploit these architectures to the full (Zhara & George, 2002; Martin, et al, 2003; 2006).

The notion of absorptive capacity of the HR function is very important in shaping internal service and e-HR adoption and exploitation (Martin et al., 2003; 2006). Absorptive capacity in this context can be defined as the *potential* for the HR function to seek out and assimilate knowledge about e-HR technologies and incorporate these into their vision for a changed HR function (Zhara & George, 2002; Jansen et al., 2005). It can also be defined in terms of the capacity of the HR function to *realize* e-HR potential, the first stage of which is to transform e-HR technologies by developing them and fusing them with existing HR processes.

One of the major debates in the practitioner world is whether e-HR technologies should be adapted to existing or revised HR processes (customization) or whether HR processes should be adapted to fit usually bought-in technologies (the 'vanilla' solution). Evidence to date suggests that the vanilla solution is winning out because of the difficulties in changing existing e-HR technologies at reasonable cost (Shrivastava & Shaw, 2004). This realization phase is also marked by the ability of the HR function to combine face-to-face and technology-mediated HR approaches to produce a new business model for HR previously discussed; that is, e-HR's ability to transform what it can currently do with available knowledge and technology into a more strategically oriented function that addresses the key strategic drivers of the organization (Huselid, et al, 2005).

The Organization and Resourcing of the HR Function (Relationship 4) refers to the different configurations of organizational structures used by organizations to deliver their human resources strategy, including decisions on centralization of decisions, outsourcing and specialization among HR professionals. Different models are currently being adopted, all of which involve choices on the development of shared services, centres of HR expertise, managerial and employee self-service and HR business partnering (Caldwell, 2008; Reddington et al., 2005; Reilly and Williams, 2003). These developments are often associated with the research and prescriptions of Ulrich, who has been credited with the tripartite model, though as Reilly and Williams (2003) and others have pointed out, there are many variations on this theme, with large HR departments still being organized along functional lines.

Shared services, which represent a highly integrationist approach to centralizing HR administrative and operational processes, are primarily aimed at cost reduction and service efficiency goals. Obviously, the more HR departments travel in this direction the more amenable they are to sophisticated e-HR solutions. The development of shared services models are also related to the desire among organizations to make line managers and employees more responsible and accountable for their own HR data in the form of self-service.

Centres of expertise refer to the concentration of advice on HR specialisms such as recruitment, development and legal services, often as part of a shared services centre. This is sometimes used to develop a greater sense of 'corporateness' and cultural integration in diversified organizations (Martin & Hetrick, 2006). Other models of expertise, however, involve distribution of centres of expertise across multiple business units, sometimes on the basis of where expertise has been historically located.

HR business partnering refers to a range of different ideas which seek to align HR staff closer to the core functions or strategic drivers of the business. There is no single model, with business partners sometimes being located in business units reporting directly to line managers, while others remain as part of a strategic team offering internal consulting to a range of internal clients (Bell, Lee & Yeung, 2006). Nor is business partnering a solution for all organizations (Hope-Hailey, Farndale & Truss, 2005) because it is often seen as promoting HR as 'hired hands' rather than the embodiment of 'higher values' and its traditional welfare role. Nevertheless, business partnering is seen as a way forward for HR staff in building greater links with senior managers and the strategic aims of their organizations, so requiring them to gain and display greater business awareness and skills, and, often, internal advisory, coaching and mentoring skills.

7.3.4 e-HR Outcomes

Finally, the adoption of specific e-HR architectures should lead to specific *e-HR outcomes* (Relationship 5). Note that e-HR outcomes can be both intended or unintended, and also positive or negative (Fisher & Howell, 2004). Another perspective is to view e-HR outcomes as producing *functional* or *dysfunctional* consequences for individuals and organizations (Stone et al, 2006; Guetal & Stone, 2005). Much of the existing literature has focused on the benefits of e-HR adoption, but it becoming increasingly recognized that there are potentially negative or dysfunctional consequences from e-HR adoption for HR staff and

their internal clients, especially if the issues connected with change management and technology acceptance are not handled effectively (Reddington et al, 2005; Ruel et al, 2004, Martin et al., 2006).

It should also be noted that the positive/negative or functional/dysfunctional classifications will sometimes depend on where one stands. For example, in the case of an e-recruitment system, where applicants are required to apply for vacancies on-line, a functional outcome would be the way in which a *“job seeker [via the recruitment web site] may be able to determine the correspondence between his or her abilities and the ability requirements of a specific job,”* (Guetal & Stone, 2005, p 235), thereby allowing the job seeker more selectivity in terms of relevant job opportunities. However, one dysfunctional aspect to placing recruitment on line relates to the *“degree that otherwise well-qualified job seekers lack access to websites,”* (Guetal & Stone, 2005, p 237) thereby rendering e-HR-based recruiting as less effective than traditional means. Another good example of positive vs negative outcomes concerns headcount reduction of HR, which is often used as a justification by the organization for e-HR but has potentially damaging consequences for organizational knowledge, as well as those HR staff displaced by the reduction.

7.3.5 Moderating Influences on e-HR Outcomes.

Again it should be noted that these outcomes will be moderated by the *change models* (Relationship 6) and approaches adopted. The change management literature is extensive, analyzing how different approaches to change produce better or worse results; controversy still exists over the merits of top-down versus bottom up change, incrementalist approaches versus ‘big-bang’ and the pace at which change should be driven, including the competence of HR to manage such change effectively.

One of the most important factors shaping the success of technological change is *user acceptance* (Relationship 7). Thus important moderating factors that need to be considered are architectural systems design decisions, factors affecting employee and manager reactions to the e-HR technologies, including the nature of individual characteristics and situational characteristics, and intended or unintended user reactions to the systems architecture (Fisher and Howell, 2004; Stone, Romero and Lukaszewski, 2006).

It is argued that the discrepancy between the structure of information processing by human beings and information technologies leads to failures in user acceptance of the technology. Accepting that there are individual differences in cognitive style, it is shown that such differences have significant implications for IT use. For example, it is argued that analytical

thinkers are more willing in general to use information systems (Lucas, 1975; Snitkin and King, 1986), and especially those systems that contain quantitative models and mathematical techniques (Benbasat and Taylor, 1978; Lu et al., 2001). In terms of the preferred methods of communication, analytics choose electronic media, while intuitives favour face-to-face methods (Barkhi, 2002).

The Technology Acceptance Model (TAM) developed by Fred Davis in 1989 states that users will accept a system if it has a significant perceived usefulness and ease of use. People tend to use (or not) an application to the extent that they believe it will help them perform their job better (perceived usefulness). Further, even if people believe that a given application is useful, they may believe that the systems are too hard to work with and that the performance benefits of usage are outweighed by the efforts required using the application (ease-of-use). It was shown that usefulness is more strongly linked to actual system use than ease-of-use. The dominance of usefulness over ease-of-use has important implications for the designers and those responsible for implementation. Across the many empirical tests of TAM, perceived usefulness has consistently been a strong determinant of the usage intentions of employees.

7.4 Addressing the Key Research Questions

The framework shown in Figure 21 raises a number of important strands of questioning for HR academics and practitioners, one of which is the experience of line managers in using e-HR systems. Whereas my earlier review of the literature was able to show an emerging body of evidence on the impact of e-HR on the HR function, there is surprisingly little on how the jobs of line managers are affected when they are progressively required to deal with more HR related tasks as a consequence of the introduction of self-service e-HR, made all the more important because line managers get the prominent role in adoption of e-HR due to their direct involvement with people management on the work floor. They have responsibilities for executing transactional HR activities through using e-HR tools, thereby having the capability to accelerate or slow down the process of e-HR adoption in organizations. Therefore, it becomes crucially important to investigate positive and challenging experiences that line managers face during e-HR adoption.

The evidence from my research has sought to address this imbalance and has assisted an elaborated, theoretical classification of e-HR outcomes. I now seek to use that evidence and discuss the implications for the framework linking *HR strategies, e-HR goals, e-HR architectures and e-HR outcomes*.

In the following sections of this chapter, I illustrate certain features of the model with the use of quantitative and qualitative data captured from UK subsidiaries of three global organizations. I pose the four research questions set out in the introduction to this thesis, underpinned by hypotheses that resonate with different aspects of the framework. :

1. To what extent are the data and information provided by e-HR systems seen to be of value to line managers? The underlying hypothesis here is that if line managers value the additional information, other things being equal they are more likely to use it and be prepared to maintain it (*transactional e-HR driver*);
2. Do line managers perceive the e-HR systems to be easy to use? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the ease of use of the system (*transactional e-HR driver*);
3. Do line managers receive good HR support to help them get the best from the tools? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the level of support in the form of communications, training and general assistance (*transactional e-HR driver*);
4. Do these data demonstrate that e-HR supports an unfolding importance or appreciation of People Management? The underlying hypothesis here is that if e-HR helps line managers to perceive their roles to be about people management as well as their technical functions, the introduction of e-HR will achieve positive outcomes in helping managers become more effective people managers (*transformational e-HR driver*).

To address these questions, I now briefly describe the methods and research process, analyze some of the data from these cases and discuss the implications for the framework.

7.5 Methods

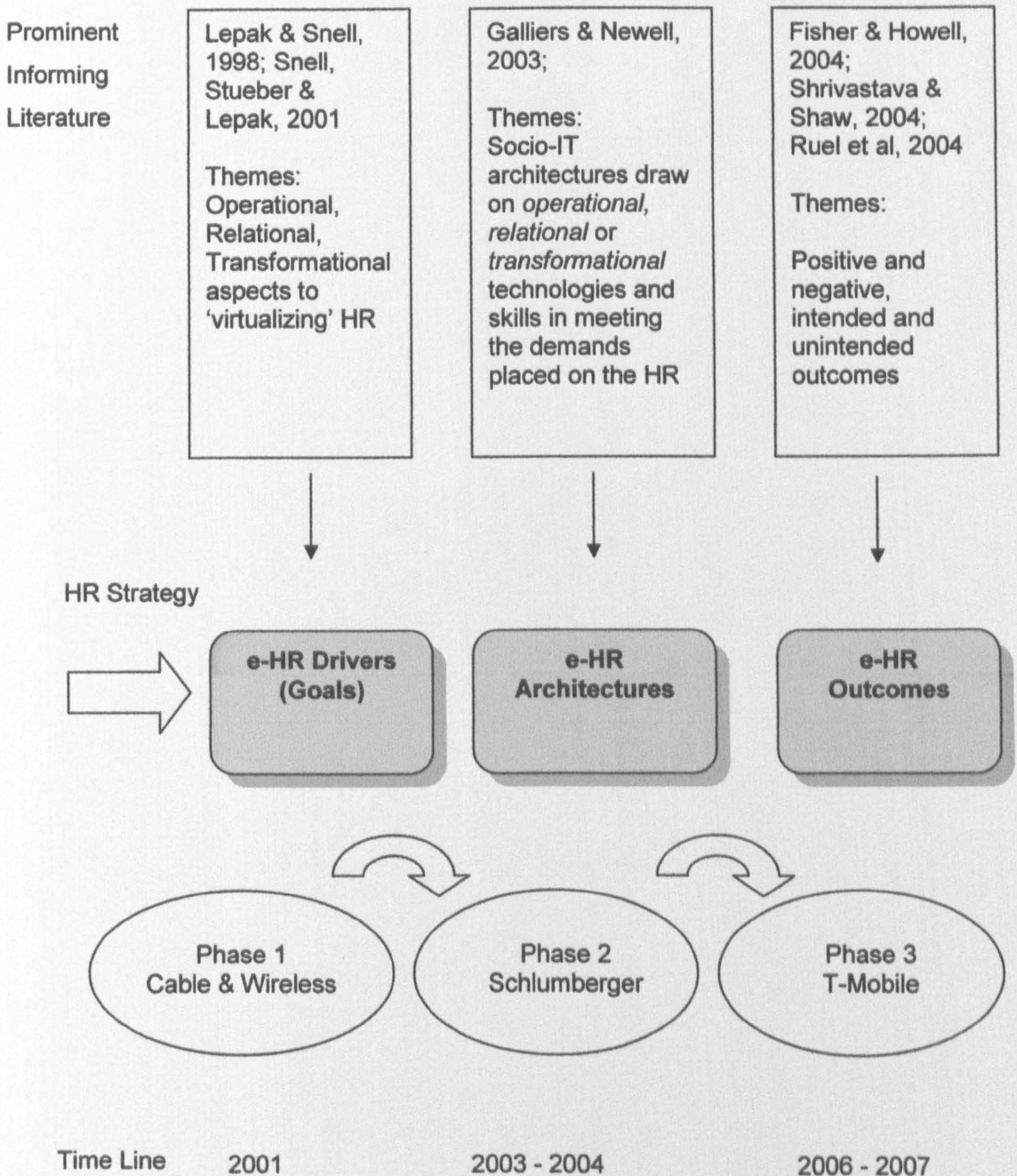
My attempts to formulate a framework linking HR strategy with e-HR outcomes might best be described as theory elaboration (Lee, 1999; Lee, Mitchell & Sablinski, 1999) in that it elaborates theoretical links addressed in the literature and seeks to provide new insights. For example, previous studies on the outcomes of e-HR have tended to rely heavily on sampling views within the HR manager population (Towers Perrin, 2002; Watson Wyatt, 2002; Boxall & Purcell, 2003; Tamkin, Reilly & Strebler, 2006) and relatively little attention has been given to the principal users of e-HR – the line managers. Previous studies have also drawn attention to the need for further research in such areas as evaluating a broader range of user reactions to e-HR (Fisher and Howell, 2004), and the implications for the development of HR professionals (Bell, Lee and Yeung, 2006).

The research cases in this thesis serve as the basis for my development of emergent theory which is situated in, and developed by, recognizing patterns of relationships across constructs, within and across cases, and their underlying arguments (Eisenhardt & Graebner, 2007). Thus, I attempt here to “simplify, reconnect and redirect theory” (Lee et al., 1999, p.166). Each case serves as a distinct analytical unit and each one has perceived relevance to the elaboration of emergent theory, as opposed to being a random sample. Thus, the treatment of these multiple cases holds out the capability of more robust analysis than would be possible with a single case (Yin, 1994; Graebner & Eisenhart, 2004).

To elaborate on this point, it is worth reflecting at this point on some of the considerations that informed the ongoing development of the framework by looking at the chronological flow of the research. Figure 22 shows the three different research phases and how they linked with some of the prominent informing literature at that time.

The research questions associated with each phase were influenced by the literature and the practical, situational characteristics of each research situation – these factors were explained in Chapters Three, Four, Five and Six. This chronological flow helps to illustrate how the combination of the literature and the research undertakings helped to forge the framework shown in Figure 21.

Figure 22: Relationships between Research Phases and Emerging Literature



7.5.1 The Cases

The cases are of perceived relevance to the elaboration of emergent theory, as opposed to being a random sample. Each case represented a leading organization in its sector and either intended to, or had implemented e-HR to a significant level. Also, each organization allowed access to their line manager populations, directly addressing one of my earlier observations and concerns about previous studies, and described in a report by one of the largest HR professional bodies in the world - the Chartered Institute of Personnel and Development (CIPD) - as the *"weakness of research that asks a senior HR manager to complete a questionnaire about HR in his or her firm and then relies on those responses for analysis"* (2002, note 13).

The essential characteristics of the cases, in terms of their main business, HR strategy, e-HR drivers and e-HR architectures, are described in Table 11.

Table 11: Essential Characteristics of Case Organizations

Business	HR Strategy	e-HR Drivers	e-HR Architectures
Schlumberger	To transform into a more strategically-orientated function concerned with the development of international team working and knowledge sharing, culture management and change issues.	Operational, relational and transformational through: creating more streamlined and integrated HR polices and processes; providing global management data; enhancing the contribution of business partners.	Shared services utilising a global HRIS to provide operational support; development of relational technologies using a combination of 'out of the box' applications and bespoke tools sourced internally.
T-Mobile UK	To become more integrated with the parent organisation, to allow more collaborative working and raise the quality of HR services in the UK. To support the business in its efforts to innovate and grow market share.	Operational, relational and transformational: streamlining and integrating HR policies and processes with the corporate centre; improving transactional service quality; freeing up time for business partners to provide more strategic advice and support.	Utilizing a new, 'single instance' HRIS to provide e-mail based HR advice service, development of relational technologies using a common HR portal, allowing access to a variety of internally and externally sourced applications, including career management and flexible benefit management.
Cable & Wireless	To develop a global HR function in support of the newly established global business. This function was tasked with facilitating rapid integration of working practices and creating a 'one company' culture.	Operational, relational and transformational with the accent on cost reduction. Shifting HR into a more strategic operation, within a leaner organization. Reducing costs of HR administration, and recruitment and learning costs.	Plans to implement a new single instance HRIS with integrated HR portal to provide access to a range of applications through employee and manager self-service. Significant reduction in HR headcount would drive the self-service culture

7.5.2 Data Sources

A summary of the data sources for all cases, and described in detail in chapters four, five and six, is shown in Table 12.

Table 12: Summary of Survey Data

Organization	Interviews	Web-based Survey*
Cable & Wireless	Consultant - Stakeholder Dialogue + Enquire Within	N/A
Schlumberger	HR Director (1) Line managers (9)	40
T-Mobile	HR Systems Manager (1) Line managers (15)	69
Totals	27	109

* The figures shown represent the number of line managers responding to the survey

7.5.3 Research Process

My investigation was informed by the characteristics that have been observed as being associated with transactional and transformational perceptions towards e-HR in the model in Figure 17 (see Lepak & Snell, 1998; Snell et al., 2002; Fisher & Howell, 2004; Reddington et al, 2005; Ruel et al, 2004; Reddington & Martin, 2006; Martin et al., 2006; Dawson, 2008; Florkowski & Olivas-Lujan, 2006; Ruel et al., 2007). I grouped the data together into these categorizations, to illustrate both positive and negative instances. For example, if a manager responded 'agree' or 'mostly agree' to the survey statement, '*e-HR provides me with the HR management information I need as a manager,*' this was interpreted as an intended, positive, transactional outcome because it relates to the provision of real time information on demand.

In contrast, if a manager answered 'disagree' or 'mostly disagree' to the survey statement, '*The training I have received on e-HR makes me comfortable in using the tools,*' this was interpreted as an unintended, negative, transactional outcome because it indicates a lack of HR support in respect of preparing the user to get the best out of the system.

With regard to the interview data, a line manager from Schlumberger reported that:

"personnel administrators, etc, are a support function... we want people who generate

revenue so if we can reduce that number of people and keep revenue generators, then you know, let's go that way.” These remarks were interpreted as an unintended, positive transactional outcome, in the sense that the manager appreciated the potential cost savings of e-HR, through the leaning of the function, although it was not HR's intention to encourage the notion of further reductions in head count. Another manager in T-Mobile reported that: *“HR needs to be more involved in the day-to-day activities to understand what is happening in business but with e-HR they only remove themselves further from the problem”* This was interpreted as an unintended, negative transactional outcome, in the sense that e-HR was seen to be the reason for an alienation in basic operational HR support.

Although the sample sizes and varying characteristics of the data sources were not conducive to sophisticated statistical comparison, another reader, who had not been involved directly in the data collection and subsequent analysis, cross-checked the assignment of the main categorisations and no conflict resulted.

The case data were analysed and then “enfolded” with a set of relevant literatures, following methods for inductive theory development (Eisenhardt, 1989, Eisenhardt and Graebner, 2007). The data were arrayed following techniques for cross-case pattern sequencing (Eisenhardt & Graebner, 2007) to inform the construction of an interpretive model linking HR Strategy with e-HR outcomes. The cross-sample analysis was used as a method to determine whether emerging relationships in one sample were confirmed or disconfirmed in the rest of the sample. As with deductive hypothesis testing, the formal observations fit a consistent pattern, though they did not always conform perfectly. This process led to the construction of an interpretive model, linking HR strategy with e-HR outcomes.

7.6 Analysis of Data

The analysis revealed a number of patterns depicting e-HR outcomes across the three case organizations. The data in Table 13 show a number of examples of positive and negative outcomes, based on responses to survey items (these apply to Schlumberger and T-Mobile only). The individual items are ranked according to their mean score, based upon the number of respondents and the combination of responses to a five-point Likert scale. This summation procedure assumes unidimensionality across the items, in accordance with the Likert scale of measurement (Latham, 2006).

It is important to note that for the purpose of this research, neutral or mid-scale values were interpreted as non-positive because in all cases the e-HR goals sought to achieve positive outcomes. The example survey statements have been selected on the basis that collectively

they represent a variety of outcomes; positive and negative, transactional and transformational. Also, a number of the statements achieved a numerical score within the extreme upper or lower range. The associated analysis of relevant qualitative information, linked to the survey statements and the different outcomes, is set out below. The information is presented in a manner intended to address the key elements of the questions posed earlier, when describing the framework.

7.6.1 Data Quality and Maintenance

Data Quality

From the survey item responses, it was apparent that data quality and integrity were well regarded within each case organization and the qualitative data largely supported this. As a manager in Schlumberger remarked: *"it is invaluable really to be able to dip in and out to find out personal details, salaries, all that kind of stuff"*. A manager in T-Mobile, however, raised the point that *"processes for recruitment, new employees, changing roles, departments, secondments and leavers, all need significant enhancements to safeguard the quality of the data."* In Cable & Wireless line managers reported that a strong process environment and systems discipline would be required to gain confidence that the data is current and can be relied upon for management purposes, otherwise it would attract scepticism.

Table 13: Comparison of e-HR Outcomes based on Web-Based Survey Data

Survey Statements	Main Cat	Outcome Measure	A	B	C
e-HR applications (Rated very useful/somewhat useful/not very useful/not at all useful/don't know/no opinion)					
Usefulness of Career Centre Tool	TF	Acceptance of self-career management	1.63	3.41	n/a
Usefulness of Performance Management Tool	TF	Improved performance management practices	1.49	2.63	n/a
Data quality. (Rated highly accurate/reliable/mostly accurate/reliable/ too many errors/ I can't trust it at all/ don't know/no opinion).					
Individual compensation data	TS	Provision of accurate data	2.01	1.97	n/a
Individual performance data	TS	Provision of accurate data	1.94	2.22	n/a
Data maintenance, HR support, ease of use and effectiveness of HR management (Rated agree/mostly agree/partially agree/disagree/mostly disagree/disagree)					
HR should monitor and audit personal data to assure that it is being properly maintained by employees.	TS	Usefulness of HR audit	1.83	1.57	n/a
Individual employees should be held accountable for maintaining their own personal data.	TF	Self-ownership of personal data	2.42	1.63	n/a
I have a clear understanding of my own people management responsibilities	TF	Role clarity	1.64	n/a	n/a
Communications I receive regarding e-HR are useful to me.	TS	HR support - communications	3.22	2.70	n/a
On-line help provided through e-HR is useful to me.	TS	HR support – online help	3.40	2.70	n/a
I received sufficient initial training on e-HR to give me a head start in using the tools.	TS	HR support – training	4.10	3.65	n/a
e-HR is easy to navigate	TS	Ease of use	2.56	3.11	n/a
e-HR has increased the effectiveness of HR management throughout my organisation	TF	Enhanced effectiveness of HRM	2.85	3.05	n/a

*The mean weighted scores are based on a Likert five-point-scale: 1 = agree/very useful/highly accurate; 2 = mostly agree/somewhat useful/mostly accurate; 3 = neither agree or disagree/don't know; 4 = mostly disagree/not very useful/too many errors; 5 = disagree/not at all useful/cannot trust it at all
A, Schlumberger; B, T-Mobile, C, Cable & Wireless

Data Maintenance

The safeguarding or maintenance of data quality was addressed in the survey and responses from managers in T-Mobile showed a strong measure of agreement concerning the notion that individuals should be held accountable for maintaining their own HR data. Overall feelings on this issue were more muted, however, in Schlumberger, with one manager reporting:

"In an ideal world where I could guarantee that 99.9% of people would keep everything up-to-date, then I'd be quite happy to hand it over to line managers and employees, but the reality is such that I don't think that's the right idea."

The manager went on to express a view that HR should provide assurance in respect of data quality:

"I know my own ability to keep data up-to-date and to work on a task in a timely fashion, and the ability isn't high. But with HR, who are paid to do these things, actually holding the keys to the trusted [HR] database, I find quite comforting."

This idea was echoed by a manager in T-Mobile, in respect of the treatment of performance management data. Referring to the storage of hard copy files containing employee performance records going back several years, the manager remarked that, "...they [HR] are the professionals and if there is something wrong with the paperwork or not enough of it filled in or if it's filled in incorrectly then the business partner ought to know reasonably quickly rather than wait two or three or four years before they suddenly realise that someone hasn't received the right element of [performance related] payment...."

7.6.2 Ease of Use and HR Support

Ease of use

In Schlumberger, the online survey results suggest weak overall agreement to e-HR being easy to use. Perhaps expectedly, the qualitative data included evidence of positive and negative views in roughly equal measure, with positions quite polarized, as illustrated by the quotes below:

"It's very good, it's very practical, it's very, very easy to use, it has to be easy to use because if you want to go back to the negative and talk about it, nobody ever got any training on it, so you know everybody who's using it has basically picked it up for themselves...the majority." (Line Manager, Schlumberger)

"My top [criticism] really is access to data – either 'bin' the main e-HR system or make it more usable. The situation as it is at the moment (I'm sure I'm not the only one to have said this) is that it's just a ridiculously poor system or it's just ridiculously poorly rolled out; it's one or the other. I believe it's the second because I believe the data's there, it's held well, it's just impossible or very difficult to get to..." (Line Manager, Schlumberger)

The comments from the line manager expressing more negative views appear to corroborate the earlier critical comments about the level of support from HR associated with the implementation of the system.

Similar comments, albeit more heavily biased towards negative views, were evident in T-Mobile, which seem to corroborate the non-positive survey data score.

"The e-HR functionality is just too difficult to use. It is not intuitive. Finding the right policies, lists of training courses etc, is just not easy..." (Line manager, T-Mobile)

"The main issue with [the system] is that it's slow and cumbersome, not intuitive and difficult to work through without experience or help." (Line manager, T-Mobile)

In one of the focus group sessions, the discussion touched on whether e-HR systems should exhibit more familiar 'look and feel' characteristics to other commonly used web-based sites, to lessen the need for familiarization with the system and enhance ease of use.

"I suppose, ultimately, we need to have more commonality with the 'buttons' that people have become familiar with. One criticism about [the e-HR system] concerns things like, 'what does that button do, or that shape over there with a different colour?' It's basically a tool which should be intuitive. At the end of the day everyone around here is probably expert at surfing the net, because you pretty much use the internet every single day and you get to know what the anomalies are. I suppose... the question is, 'do we need to go down this sort of web technology look and feel?'" (Line manager, T-Mobile)

There were no direct comments relating to usability from line managers at Cable & Wireless, although there were references to implied, related concerns, such as lack of flexibility and enhanced workload.

HR Support

The level of quantitative and qualitative data indicated directly or indirectly that participant line managers in all organizations being critical about the 'usability' of e-HR, which I believe is linked, at least in part, to the level of HR support received before, during and after implementation of the e-HR tools. Examples of negative sentiment are shown in the assortment of comments below:

"It's not the system itself; I'm sure in a month or so time I'll feel totally comfortable with it. It's just that it's completely changed because I had no training on how to do it." (Line manager, T-Mobile)

"They are a very powerful set of [e-HR] tools, but it's how we introduced them and how we failed to manage the change process that led to the fact that people are negative about them." (Line manager, Schlumberger)

Probing some of the reported difficulties in more detail, the majority of managers' comments, cited the paucity of communication concerning e-HR as a factor triggering negative sentiment:

"Personally, I would say the negative reaction is probably because I don't think we receive that many communications about many of the HR tools or opportunities to use data..... I think it almost feels like there's a black hole out there [HR data repository] with a lot of information in it and there's nothing coming out or there's no way of getting in to get that information." (Line manager, Schlumberger)

"New systems... should be communicated well and users need to understand why these things are happening. This would lead to less resistance." (Line manager, T-Mobile)

"...the message that comes across is mixed and it's not a constructive message. I think they've [HR] got to develop how to execute that message and once they get that right then I think things will come through... we're having to find [things] out for ourselves and

it leads to people using different methods and certain tools in certain ways and it becomes a kind of a mixed bag .” (Line manager, T-Mobile)

The only supportive comment about the quality of communications was from a manager in Schlumberger:

“Communications, I think they are useful, I tend to flick through them although I find they’re not particularly relevant but I don’t think there’s such thing as bad communication unless it’s badly written and I think from what I remember they’ve all been well written so, I don’t have a particular problem with that one.”

The comments from Cable & Wireless simply reflect a concern about whether enough and effort will be invested in training and support.

Indeed, the online survey results depict a low level of value attached to training and responding to requests for help. Most of the qualitative data corroborate these results, although some exceptions were evident. For example, one of the survey questions sought to probe the perception of usefulness of online help. A manager from Schlumberger was highly critical of the online help available, remarking, *“...forget on-line help; if something needs on-line help it’s too complicated....”* The same manager drew attention to the point that *“People don’t avoid using the system because they don’t want to use the system, it’s because they don’t know how to use it, it’s a pain in the backside, it takes too long.....”*

A manager from T-Mobile also recognized the need for more training and had a more positive attitude to online help:

“I feel the training given on usage of e-HR was very limited and I don’t tend to use it frequently – it would be helpful to have an online supporting procedure to demonstrate how to use it for future reference.”

Most of the evidence, however, strongly identified a lack of training and support as a major cause of negative feelings towards the e-HR tools. A line manager in organization B asserted that *“When we implement new systems... every department should send someone along to be trained up to use it,”* a point reinforced by another manager from the same organization who complained that *“...we get very little direct [HR] support so the training for us initially before you get started is really crucial. Without that, you know, you would have to rely on [HR support] but they don’t answer your queries there and then. So if you haven’t had the training before you start, you’re kind of lost.”*

7.6.3 Appreciation of People Management

The survey evidence suggests that line managers were broadly non-positive in their perception of the impact of e-HR on the effectiveness of People Management throughout the organization, although the interview data were patchy.

In T-Mobile, no evidence of e-HR positively impacting HR effectiveness could be found; instead the tone of the comments reflected a more sanguine view about the level of HRM practices, as illustrated below:

“One thing this company really doesn’t have is people managers; it has HR who does something, it has line managers who spend 80 or 90% of their time on technical issues. It doesn’t really have the concept of people managers and people who are there to inspire and motivate medium or large size teams; that individual simply doesn’t really exist in the company.” (Line manager, T-Mobile)

In Schlumberger, one manager appeared to sum up very well the factors influencing a non-positive outlook to the HR effectiveness question:

“.....I don’t see how anyone can comment that the e-HR tools meet the business drivers or meet the needs of the business function if they [line managers] don’t know how to use them or they don’t enjoy using them. They could be perfect for the business use but if no one knows how to use it properly then they aren’t the right tools.....” (Line manager, Schlumberger)

In Cable & Wireless, however, managers did acknowledge that improvements in efficiency and effectiveness of HR could result from an e-HR implementation. I feel, though, that this more positive outlook was to some degree smothered by the concerns relating to training and support, suggesting that *potential* benefits might not be realised.

Career Planning and Performance Management Tools

Set against the general backdrop described above, two specific e-HR tools - career planning and performance management – were probed to assess their perceived usefulness in supporting line managers to perform their roles. Contrasting outcomes could be identified

in Schlumberger and T-Mobile. For example, in respect of the career planning tool, the general sentiment in Schlumberger was summed up well by one line manager, who opined: *"I think the Career Centre is very good in that we have the ability to look and find people in their particular skills sets through a system. I think it gives the organization a good starting point to find or fill the varied opportunities that we have throughout the world."* But such sentiments were not evident in T-Mobile. Although using the same HRIS supplier as Schlumberger, the perceived usefulness of career management was rated lower in the survey, with one manager confessing: *"It's only recently that I discovered where the Career tool was... this survey has brought it to my attention."* Another comparison, although not explicitly supported by the qualitative data, relates to Schlumberger having introduced an internally sourced career tool, tailored to the needs of the business, whereas T-Mobile was using the tool supplied with the 'vanilla' software configuration of the HRIS. This may have contributed to the differences in the survey ratings between the two organizations. In relation to performance management, a line manager in T-Mobile described perceptions of a new on-line performance management system, which was implemented by HR to accommodate a new approach to performance management, based on accountabilities:

"It's very good that we've got this new approach and I think it is much better than what we've had in the past. Accountabilities should make things clearer for individuals to actually see what they're doing and how they're progressing....."

But the manager went on to say that the implementation of the new system created numerous problems, prompting the comment that *"it's a brilliant idea, but I just think it was done poorly....."* This comment was reinforced by a colleague, who claimed that *"...It's because we try and implement too many things. I think that if we implemented less then we would probably do it better. Too many people are working on things that take up resources in the business without properly adding too much value"*

The sense that the new performance management system had been hastily implemented probably diminished the survey rating for the usefulness of the tool; an issue not identified in Schlumberger, where numerous advantages were reported by the line managers:

"...the sheer power of being able to see your staff performance over say the last 3 or 4 years and observe how well they've been doing at the click of a button; it's just fantastic, compared to previously where it was a case of 'who you know'"

"...it has got a useful part to play in the redundancy process as well; you only have to look at redundancy by performance, then it's all there. No one can come back and argue it because when we do performance appraisals we both agree what the result of that performance appraisal is."

Line Manager Perceptions of their own People Management Responsibilities

The examples above are related to a broader question concerning whether line managers have a clear view about their own people management responsibilities.

In the absence of survey item data addressing this matter for T-Mobile, the focus group interviews provided some insightful comments from a number of line managers:

"There isn't a very clear way for [line managers] to understand their responsibilities; no-one really knows what their responsibilities are....." (Line manager, T-Mobile)

"...it is often extremely difficult to work out the demarcation lines as to what HR is actually responsible for delivering and what the line manager is responsible for doing as well. Sometimes you think you can ask someone for advice and assistance, other times you're informed that it is not their job. On other occasions you make decisions and then you are told, 'no, it's not your job to make that decision and someone else should have made it instead'. So it is not a very transparent organization as far as what is expected of a line manager or what sort of help HR are prepared to give, especially in the context of the electronic systems that we've got" (Line manager, T-Mobile)

This ambiguity was probably linked, as one manager suggested, to the host organization failing to give the people management aspects of a line manager's role significant attention, allowing people to be promoted to management posts, sometimes against their wishes, primarily as an acknowledgement of their technical abilities:

"...the organization started small and grew very quickly and some people ended up as people managers who didn't want to be. So they see themselves as primarily 'technical' with the view that their people can manage themselves... You can't always train those people to be people managers because that's not what they want to do" (Line manager, T-Mobile)

By contrast, the survey results for line managers in Schlumberger appeared to indicate a greater degree of understanding about their people management responsibilities, which was attributed, at least in part, to the recent introduction of an HR 'scorecard'. As one manager commented:

"This year we all have a personnel scorecard target and various things are measured. For example, one objective is related to how many of our guys have their CVs on line. So, we tend to call up our guys and tell them, 'well do it before the end of the week, otherwise you're hurting me'."

Nevertheless the same manager further opined that such actions were *"a matter of time and mental maturity of the manager, because there is no global communication from senior management explaining why this has to be done."* (Line manager, Schlumberger)

This maturity aspect was also raised by another manager, who stated that whilst people management objectives set out by his organization were understood, it was not helpful to think that *"you can put together, almost like a check sheet that says, 'if this happens, then this is the HR person who deals with it and if this happens, go to this person.' I think with experience and some good training you can definitely point people in the right direction."* (Line manager, Schlumberger)

The Cable & Wireless line managers did not appear to raise this topic directly but it could be inferred from their concerns about the possibility that HR might take too much of a "hands off" approach, thereby creating a lack of consistency at line manager level in the enactment of personnel management responsibilities.

7.6.4 Combined Results

The combination of weighted survey data and associated qualitative data can be mapped onto an e-HR outcome table (see Table 14), using an interpretive approach described earlier in the Research Process. Only Schlumberger and T-Mobile data are shown because the Cable & Wireless qualitative data could not be mapped against the survey items. However, in the ensuing discussion, I provide a general, descriptive interpretation of some of this data.

Table 14: Comparison of Positive and Negative Examples of e-HR Outcomes Based on Web-Based Survey Data and Interview Data

Survey Statements	Main Cat	Pos A	Pos B	Neg A	Neg B
e-HR applications (Rated very useful/somewhat useful/not very useful/not at all useful/don't know/no opinion)					
Usefulness of Career Centre Tool	TF	X			X
Usefulness of Performance Management Tool	TF	X			X
Data quality. (Rated highly accurate/reliable/mostly accurate/reliable/ too many errors/ I can't trust it at all/ don't know/no opinion).					
Individual compensation data	TS	X	X		
Individual performance data	TS	X	X		
Data maintenance, HR support, ease of use and effectiveness of HR management (Rated: agree/mostly agree/partially agree/disagree/mostly disagree/disagree)					
HR should monitor and audit personal data to assure that it is being properly maintained by employees.	TS	X	X		
Individual employees should be held accountable for maintaining their own personal data.	TF	X	X		
I have a clear understanding of my own people management responsibilities	TF	X	X		
Communications I receive regarding e-HR are useful to me.	TS			X	X
On-line help provided through e-HR is useful to me.	TS			X	X
I received sufficient initial training on e-HR to give me a head start in using the tools.	TS			X	X
e-HR is easy to navigate	TS	X			X
e-HR has increased the effectiveness of HR management throughout my organisation	TF			X	X

Notes: X' denotes the interpreted e-HR outcomes, based on a combination of survey and interview data; Cat, category; Pos, positive; Neg, negative; A, Schlumberger; B, T-Mobile

7.7 Discussion

These results show that a combination of survey data and interview data produce examples of positive and negative outcomes in both transactional and transformational categories. In the areas of data quality, the assurance of HR audit, individuals accepting accountability for maintaining their own data, and having clarity of their people management roles, the evidence for Schlumberger and T-Mobile showed positive outcomes. Cable & Wireless data were patchy and suggested that data quality was a concern and might attract scepticism if not properly maintained.

Similarly, there was an inference that clarity associated with personnel management might be adversely affected if HR adopted a 'hands off' approach.

The picture is mixed in respect of the usefulness of e-HR communications. Schlumberger and T-Mobile showed negative outcomes. In Cable & Wireless, there was no evidence to address this matter directly, as the comments simply reflect a concern about whether enough effort would be invested in training and support by HR, as the e-HR implementation unfolded.

The data relating to usefulness of the career management and performance management tools were perceived differently in Schlumberger and T-Mobile. The data relating to Schlumberger showed strong evidence that the career tool was perceived as useful, which was interpreted as a positive, transformational outcome because it was shown to have enhanced the ability of line managers to make improved search and selection decisions on a global basis, in respect of filling job vacancies. Such evidence could not be found in T-Mobile and the outcome was interpreted to be negative, on the basis of the survey score.

At Schlumberger there was strong evidence that the performance management tool was perceived as useful, making a good contribution to management decisions linked to performance appraisals and also helping to structure decisions concerning redundancies. By contrast, T-Mobile reported strong support for the intent behind the new tool, namely to improve setting and monitoring of accountabilities linked to performance targets, but the rushed implementation had impaired its usefulness. As a consequence of this discovery and the non-positive survey score, the interpretation of the overall outcome was negative.

With respect to HR support in terms of online help, all organizations were interpreted to have negative outcomes. Although the survey score for T-Mobile suggested some modest support, the qualitative data strongly indicated poor perception, thereby rendering the overall interpretation as negative. In the case of Schlumberger, both survey score and interview data supported a negative outcome. The perception of the usefulness of initial training elicited a negative outcome across both organizations, supported by survey scores and qualitative data.

The survey scores in respect of the perception of ease of use of the e-HR tools showed weak support in Schlumberger and a distinctly non-positive outcome in T-Mobile. The interview data suggested that the overall weight of evidence was negative for T-Mobile. Combined with the survey scores, these data were interpreted as negative overall. Only Schlumberger emerged with a positive combined rating, albeit a rather weak one. This was decided on the basis that the interview data were not sufficiently negative to affect the survey score.

On the question of whether the e-HR tools were perceived to enhance HR effectiveness, the combination of survey and interview data were interpreted as non-positive in the case of Schlumberger and T-Mobile. In Cable & Wireless, the managers did acknowledge the *potential* for improvements in efficiency and effectiveness of HR but seemed less than convinced through their expressed concerns about training and support.

As to the data in the featured cases, these are not meant to be a strict statistical test of the model; rather they act as a partial test and help illustrate some of its essential features and explanatory power. Indeed, whilst I accept that the combination of quantitative and qualitative data in multiple settings allows broader comparisons, offering the potential of triangulation of different data sources, I have attempted to avoid a naively 'optimistic' view that the aggregation of data from different sources will add up to produce a more complete picture unproblematically (Hammersley & Atkinson, 1983; Bloor, 1978; Fielding & Fielding, 1986).

The findings do provide some insights into how the jobs of line managers are affected when they are progressively required to deal with more HR related tasks as a consequence of the introduction of self-service e-HR. This research illustrates that positive and negative outcomes of e-HR can be attributed, in part, to the difference in the context of the organizations; in Schlumberger, the e-HR architecture incorporated in-sourced, tailored applications, such as career and performance planning that achieved positive outcomes. T-

Mobile relied more heavily on 'vanilla', 'out-of-the-box' solutions and this was deemed to be a contributory factor to the more negative outcomes evident in respect of those tools. At Cable & Wireless, although no e-HR functionality had been delivered at that point, the line managers appeared to raise many more concerns than positive points.

Drawing on the existing literature and my research findings from the case work I have set out a theoretical framework linking e-HR strategy to e-HR outcomes, showing its relationship to key antecedent variables, such as HR strategy and the organization of the HR function.

I have assembled and classified these outcomes into a table – see Table 15. For example, the outcome, 'HR audits and monitors personal data to assure it is being properly maintained by employees' was identified in the case research in Tables 13 and 14 and can be classified as a positive, transactional outcome. The outcome, 'HR Headcount Reduction' was not specifically identified in the case research but is featured in the literature (e.g. Snell et al., 2002).

I believe that the primary theoretical contribution of this table lies in the attribution of *transactional* and *transformational* outcomes, which the model shows have a 'line of sight' with HR strategy.

The overall framework also highlights important moderating variables such as technology acceptance and change models. The model was derived from my knowledge of the extant analytical and prescriptive literature in this emerging field and from cognate literature on information systems and strategy. It has also been developed inductively from case research described in this article: data from these cases have helped produce some of the categories of explanation for the model; in turn, the model helps organize and explain the data. Consequently, it can be used as a starting point for a framework for analyzing data on e-HR implementation and normatively as a guide to practitioners who are embarking on this process for the first time.

However, the data also show where further development and 'complexification' in theorizing might be needed. Having reflected on the evidence for the cases and writing this paper, I feel that the development of the model itself would benefit from further research providing a deeper and broader coverage of cases, in particular exposing the similarities and differences in perception of e-HR outcomes, as seen through the lens of both HR and line managers. I referred earlier to the lack of well researched evidence of line manager perceptions of e-HR, which our study has attempted to address.

Table 15: Classifying e-HR Outcomes

Intended

Positive	Negative
<p>Transactional Improved access to good quality real time individual compensation and performance data HR audits and monitors personal data to assure being properly maintained by employees e-HR is easy to navigate Reduced costs of HR transactions and HR headcount reduction</p> <p>Transformational Individuals should be held accountable for self-management of their own personal data Managers and employees have clear understanding of their own people management responsibilities Career centre and performance management tools provide good tailored solutions on demand, improve talent management through self-selection, self-assessment and enhanced performance management. Cultural shift which sees increased self-efficacy among managers and employees for conducting people management - related activities Greater sense of corporate identity through uniform HR portals More time for HR to focus on expert/strategic issues</p>	<p>Transactional HR headcount reduction</p> <p>Transformational Lack of face-to-face contact and remoteness of HR staff from 'clients' Intellectual property and data ownership transferred to outsourcing partner</p>

Unintended

Positive	Negative
<p>Transactional Spill-over of information from HR into other areas of business</p> <p>Transformational Greater sense of organizational innovativeness/progress modelled through adoption of sophisticated e-HR</p>	<p>Transactional Manager/employee frustration over ease of use of e-HR tools Lack of HR support and training Poor communications Poor on-line help Resistance to new ways of working through 'benign neglect', opposition or mild forms of sabotage.</p> <p>Transformational e-HR fails to improve the effectiveness of HR management throughout the organisation</p>

Note: e-HR outcomes highlighted in blue were observed from a combination of survey and interview data from the research cases; non-highlighted outcomes are informed by the literature

But it is also evident that the reporting of HR perceptions towards e-HR in many instances relies too heavily on data collected from a single or small number of participants per case. I think that by addressing these areas more robustly it will be possible to achieve better identification of receptive contexts for e-HR implementation at both the organizational and individual level.

In previous work, Martin & Beaumont (2001) set out the importance of different levels of context at a cross-level effect, especially as it applies to strategic HR changes in multinational organizations. Two of the most relevant levels of context that help explain the results in these cases are: (a) the organizational context, which refers to the cultural distance between the parent organization and the subsidiaries, the attitudes of managers to learning and change, and compatibility of practices between the parent and subsidiary organizations and (b) the relational context, which refers to the attitudes of the parent organization managers to subsidiary managers and employees and the dependence of the subsidiaries on the parent organization for resources. One of the limitations of this work is the lack of data that illuminate differences in dependence of these subsidiaries on the parent for survival.

Chapter Eight

Conclusions

8.1 Introduction and Background

After working on this research for seven years, my reflections on the whole experience create an over-arching sense that the DBA has shaped and influenced a significant shift in my academic and professional outlook. This chapter attempts to capture the essence of that journey, which depicts my development as an academic researcher and practitioner. In doing so, it draws attention to some of the main features which, in my opinion, define my contribution to knowledge and practice in the field of e-HR. I also attempt to identify and articulate where further research in this field could be undertaken.

In the following sections of this chapter I endeavour to set out the more important insights and achievements that underpin my contributions to knowledge and practice. In the process, I have also attempted to show examples of their interwoven nature within the context of my research situations. Throughout, appropriate references are made to the relevant chapters and appendices in this thesis that provide fuller accounts in support of the matters under discussion.

8.2 Contribution to Knowledge

This is primarily attributed to my attempts to formulate a framework linking HR strategy with e-HR outcomes, described in Chapter Seven. Certain features of the model are illustrated with the use of quantitative and qualitative data derived from the UK based subsidiaries of three global organizations. A claim for theory elaboration (Lee, 1999; Lee, Mitchell & Sablynski, 1999) is made on the following basis:

The model attempts to “simplify, reconnect and redirect theory” (Lee et al, 1999, p 166) by generating a ‘line of sight’ between HR strategy and e-HR outcomes. This was achieved by borrowing contributions from other models reviewed in the literature (e.g. Lepak & Snell, 1998; Snell et al, 2002; Galliers & Newell, 2003; Fisher & Howell, 2004; Shrivastava & Shaw, 2004; Ruel et al, 2004) combined with data and observations from the research.

I reclassify e-HR outcomes as transactional and transformational, the former by conflating operational and relational aspects previously defined in the literature (Lepak & Snell, 1998; Snell et al, 2002). Examples are shown in Table 15 and Appendices 2 & 3.

The e-HR outcomes are derived from sampling both HR and line managers. The inclusion of line managers, in particular, filled a discernible void in the literature, which recognised the lack of credible research in this area (CIPD, 2002; Lawler & Mohrman, 2003).

In the introduction to this thesis, the main research question, 'How do HR and line managers perceive the outcomes of e-HR?' was expanded into four associated questions, regarding the impact of user acceptance and HR change models on e-HR outcomes, which have not been thoroughly explored in the literature in this area.

- 1) To what extent are the data and information provided by e-HR systems seen to be of value to line managers? The underlying hypothesis here is that if line managers value the additional information, other things being equal they are more likely to use it and be prepared to maintain it (transactional e-HR driver)
- 2) Do line managers perceive the e-HR systems to be easy to use? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the ease of use of the system (transactional e-HR driver)
- 3) Do line managers receive good HR support to help them get the best from the tools? The underlying hypothesis here is that adoption and exploitation of e-HR will, in part, depend on the level of support in the form of communications, training and general assistance (transactional e-HR driver)
- 4) Does e-HR support an unfolding importance or appreciation of People Management? The underlying hypothesis here is that if e-HR helps line managers to perceive their roles to be about people management as well as their technical functions, the introduction of e-HR will achieve positive outcomes in helping managers become more effective people managers (transformational e-HR driver)

These questions resonate with different aspects of the model and my conclusions from the three research cases featured in this thesis are:

In the cases of Schlumberger and T-Mobile, the evidence in respect of the quality of personal and HR data available from the e-HR systems, were regarded as mostly accurate and reliable. It was also evident that individual managers mostly understood the need to be accountable for personal data maintenance and mostly agreed that HR should monitor and audit personal data to assure its proper maintenance. This appears to support the idea, at a basic level, that e-HR has the potential, all things being equal, to assist HR managers to take on more responsibility for people management. This potential was also recognised in the feedback from line managers at Cable & Wireless.

The implied usefulness of e-HR referred to above, is moderated, however, by a sense that e-HR was not easy to use and many managers felt let down by the lack of HR support, to help them get the best value from the tools. This suggests that adoption and exploitation of e-HR was inhibited, with only Schlumberger showing a weak, positive outcome. In the case of Cable & Wireless, it was an implied inhibition, associated with concerns relating to training and support, suggesting that potential benefits might not be realised.

Concerning the relevance of e-HR to line managers' job roles and the attendant potential to improve their effectiveness in people management, the data suggests that all organizations displayed a non-positive result overall. This is despite the acknowledgement that the e-HR systems possess good quality data and, specifically in the case of Schlumberger, the career and performance management tools were highlighted for their usefulness. This could be attributed, at least in part, to the development of tailored, bespoke systems at Schlumberger compared with the 'vanilla' configuration adopted at T-Mobile. In Cable & Wireless, the managers did acknowledge that improvements in efficiency and effectiveness of HR could result from an e-HR implementation, but there was also implied scepticism about the potential improvements being realized.

It should also be noted that other work related to the development of the theoretical framework, thereby constituting a contribution to knowledge, were featured in academic papers which can be found in Appendix 1.

8.3 Contribution to Practice

This section attempts to reveal some of the more significant contributions to practice, linked where appropriate to the development of my theoretical contribution.

My role at Cable & Wireless Global (CWG) during the period 2000 to 2002 has been well documented in earlier chapters. The nature, size and scope of the programme made it conspicuous in the 'world of e-HR' at that time, and I was called upon to speak at a variety of conferences and events and became the subject of media attention. An article in Personnel Today (February 2001) entitled, 'HR spend to be slimmed down by going online', drew attention to the underlying cost cutting aspect of the e-HR programme at CWG and quoted me as saying:

"We have been working on this [e-HR programme] for eight months and it has been a massive learning curve. Everyone in the team has been trying to secure the best process for the business across the globe." (p 1)

This referred to the fact that the project had been active at that time for eight months, following main board approval of the Initial Business Case, and conveyed a sense of the efforts being made to secure buy-in on a global scale for new standardised business processes. Although I was perhaps not fully aware of it at that time, the difficulties and challenges presented in engaging representatives from different businesses to seek their support for new ways of working exposed the fundamental dialectics of e-HR. Whilst standardisation of HR processes and the liberation of HR, through the provision of self-service tools to managers and employees alike were seen as excellent outcomes from an e-HR programme perspective, this did not necessarily resonate with the users or recipients of e-HR. There were many voices opposed to the initiative because it was seen not as a liberating force but a force for centralisation and control and a way of stripping away HR resources as more HR tasks were devolved to the line.

It is interesting to note that my comments in other articles just a few months later reflected my growing understanding that introducing e-HR was really about transforming business practice and shaping new relationships at the critical interface between HR and line managers, underpinned by technology.

An article in Human Resources Magazine (August 2001) entitled, 'The dawning of new world HR' revealed these insights. When asked by Maurice Mendoza, the editor of Human Resources Magazine, about how easy was it to win over line managers to the new system, I responded:

"You have hit on a crucial point here because if you don't handle this properly it could simply be perceived as HR dumping extra administrative burdens on an already busy manager. You have to be able to demonstrate to the managers how it will save them time, so there is no added burden on them." (p 41)

These comments reflected my growing understanding of the task at CWG in the practical sense but also started to show my engagement with the literature, such as the dialectics of technology and people management (CIPD, 2001, 2002; Gallie and Green, 2002) and the operational and transformational aspects of virtualizing HR (Lepak & Snell, 1998).

I was also struck by the observation that much of the literature on e-HR appeared to exclude the perceptions of line managers; views were almost always characterised through the lens of HR professionals or external consultants (a matter addressed in the literature review in Chapter Two). This gave me the incentive to probe this contrast in more detail in subsequent research and indeed to seek the development of a framework that might help explain better the perceived 'outcomes' of e-HR and the 'drivers' that promoted its use.

8.3.1 Publications

After leaving CWG at the end of 2002, I started to develop my consultancy practice, Martin Reddington Associates, with the increasing realisation that I would be well positioned to bridge the academy and practice in the field of e-HR. My optimism was reinforced when Linda Holbeche, Director of Research at Roffey Park Management Institute, invited me to run a one day Master Class on HR Transformation in March 2003.

The feedback from the delegates was very encouraging, to the extent that shortly afterwards Linda informed me that Roffey would be prepared to sponsor a publication entitled, 'Delivering Value from HR Transformation' based upon the content discussed at the Master Class. I co-authored the publication with two colleagues who had assisted me on the Cable & Wireless programme – Mark Williamson and Mark Withers - and it was released in December 2003. This represented a tangible and demonstrable contribution to practice in the field of HR Transformation, underpinned by technology, drawing upon my experience and insights gained from CWG and infused by the wider knowledge gained from my DBA studies.

This publication acted as a catalyst for a number of follow-on articles, the most significant of which comprised a three-part series in the weekly news magazine, *Personnel Today* and an article in the respected HR professional journal, *Human Resources and Employment Review*. These became part of a growing foundation of published work which was instrumental in enhancing my general visibility and profile as a subject matter 'expert' (see Appendix 8).

8.3.2 British Academy of Management

In the summer of 2004, I learned both to my surprise and satisfaction that I had been selected to appear at the British Academy of Management (BAM) annual conference, 2004, at St Andrews, Scotland. My submission, 'A critical assessment of manager perceptions of e-HR', had been accepted as a poster paper for the Human Resource Management track (see Appendix 9). This acceptance gave me the opportunity to discuss my research with fellow academics. I was pleased with the degree of interest shown (perhaps out of politeness in some cases) and encouraged to maintain my efforts, as many delegates remarked that the whole area of e-HR was conspicuously under researched and warranted further examination.

8.3.3 Research Links with the Chartered Institute of Personnel and Development

My developing knowledge in the field of e-HR and in particular getting 'beneath the surface' of the subject to reveal line manager insights, led to my being invited to speak at an event organised by the Chartered Institute of Personnel and Development (CIPD) in May 2005, entitled 'HR Service Delivery and Outsourcing Dilemmas'. My presentation addressed the topic of 'The sunshine and shadow sides of technology: employee self-service and the role of front line managers', and for me this was a highly symbolic moment which seemed to bring together, with the full recognition of the CIPD, the key strands of my research and experience in the field to date.

Some months later, in August 2005, I was invited to be a member of a CIPD Research Steering Group, linked to a 12 month CIPD research project on 'HR and Technology'. The Steering Group had an important initial role in ensuring that the CIPD focused on the appropriate research questions, and then subsequently supporting and guiding the research project to ensure it would be of maximum relevance to CIPD members.

My DBA work was a superb foundation for my contribution to work of the Steering Group. I was also able to learn so much more from my colleagues, notably Professor Graeme Martin,

which led to reinterpretations and embellishments of relevant literature surrounding e-HR at that time, and contributed to my conceptual theory development.

More recently, in June 2008, I was awarded (in collaboration with Professor Graeme Martin) a CIPD research contract to examine the emerging phenomenon of 'Web 2.0'. This is the generic term given to a collection of web-based social media technologies, which encourage greater collaboration among employees, customers, suppliers and partners, and opportunities for more authentic forms of 'voice' on issues that matter to them (Bernoff & Li, 2008). This forms a natural extension to the e-HR research set out in this thesis and our findings are expected to be published in a CIPD research report in January 2009.

8.4 Potential Future Research Directions

In Chapter Seven, I drew attention to some of the perceived shortcomings in the theoretical model linking HR strategy with e-HR outcomes. These related to the need for more data from a larger spread of organizations and more in-depth examination of cultural factors at both organizational and individual, situational levels.

Also, as I alluded earlier, the emergence of Web 2.0 provides another facet of e-HR which could be usefully incorporated into future research. As such, I would advocate that researchers should systematically test and develop recent theory that seeks to explain how different organizations innovate and exploit e-HR effectively. In my view, this would give rise to a number of new research questions:

- I. To what extent have the claims made by advocates of e-HR and Web 2.0 for improved cost effectiveness and reductions in HR headcount been realised, and what are the key impediments to realising benefits?
- II. To what extent have the claims made for improved service delivery to managers and employees been realised and are there significant negative effects in moving from a face-to-face to a virtual relationship in people management, which have not been apparent to systems specifiers and developers?
- III. To what extent has e-HR and Web 2.0 helped transform current people management practices, including freeing up HR staff to work on more strategic-level issues, enhancing collaboration and giving employees greater 'voice'? What is the potential for such

developments in the near future, and how are they likely to change the nature of HR work, managerial work and employee relationships?

- IV. Are those HR departments and organizations that are best suited to innovation in e-HR and Web 2.0 also the best suited to exploiting such learning?
- V. Arising from the above, what change-management models and practical tools are needed by organizations to facilitate knowledge acquisition and exploitation of the positive benefits of e-HR and Web 2.0 in terms of cost effectiveness, improved service delivery and HR transformation?
- VI. Are specific clusters of practices regarding the deployment and usage of e-HR and Web 2.0 encountered at regional and industrial level? If so, what are the organizational and contextual determinants of such combinations of practice, and what are the theoretical implications of this?

This research could potentially lead to the development of practical tools and techniques designed to assist technology acceptance and diffusion of e-HR and Web 2.0, and to provide the basis for creating a more effective, ongoing dialogue between producers and users of e-HR and Web 2.0 by developing a shared language through scenario planning and e-enabled communities of practice.

8.5 Overall Reflections

In this chapter, I have tried to give a relevant and varied account of the main events over the last seven years that have shaped and developed my contribution to knowledge and practice in the field of e-HR.

I am the first to admit that the nature and pattern of events is beyond what I could have reasonably imagined at the outset; I had little idea that the pursuance of the DBA would act as a platform and catalyst for so many opportunities to speak, write and consult.

It is clear that my DBA journey will not conclude with a beautifully bound thesis gathering dust on the shelf. It will continue to live on through my engagement in new and exciting research

that will hopefully push the boundaries of knowledge and practice in the field of e-HR and related HR transformations.

APPENDIX 1

Theorizing the Links between e-HR and Strategic HRM: A Framework, Case Illustration and Some Reflections

Martin Reddington & Graeme Martin

In this paper we develop a model of e-HR that explains the relationship between HR strategy and potentially positive and negative e-HR outcomes. This relationship is moderated by a number of key factors, including the organization and resources of the HR function, the absorptive capacity of HR, the skills and preferred styles of HR professionals, the levels of technology acceptance among employees and line managers and the models of change used in implementing e-HR programs. We illustrate certain features of this model using data from a case study of a leading global oilfield services provider. These data provide a partial confirmation of the model's validity but show the need for a more dynamic understanding of the links between e-HR variables and importance of context in explaining differences between line managers' acceptance of e-HR.

Introducing e-HR

e-HR's role In Strategic HRM: A Definition.

The e-enablement of HR (e-HR) is one of the most important recent developments in HRM, which when linked to outsourcing has the hypothetical potential to lead to virtualized function (Geueta & Stone, 2005; Martin et al., 2006; Snell et al, 2001). Yet, despite the growing body of literature devoted to e-HR, it remains under-theorized. A useful starting point for conceptualizing e-HR is to see it as the internal application of e-business techniques, extending the traditional externally focused conception of the 'virtual value chain'(Rayport & Sviokla, 1995) inside the organization. By creating added value for managers and employees (HR's 'marketspace') through more effective and efficient information flows, HR can claim to help create competitive advantage and align the function more closely with business/corporate strategy in at least three ways. First, e-HR can reduce HR transaction costs and headcount (e.g. supplying HR information to large numbers of people on a virtual rather than physical basis). Second, e-HR can substitute physical capability by leveraging the 'law of digital assets' to re-use information flexibly on an infinite number of occasions at little or no marginal cost (e.g. in delivering e-training and e-learning to large numbers of people). This can enable more effective virtual 'customer relationships' and internal labor markets by increasing the reach and richness of two-way information (e.g. enabling internal/external recruitment and search, career development and performance management, employee engagement surveys to tailor specific 'employee value propositions' to small groups of employees, more flexible working to attract people from non-traditional recruitment pools, outsourcing of key HR services, etc). Third, it can transform the HR 'business model' by e-enabling HR to provide strategic value to the business that it previously could not do, for example, by using online learning to 'feed-forward' into organizational learning and knowledge management, create virtual communities of practice and facilitate more flexible organizational structures and ways of working.

Though the use of IT in human resource information systems (HRIS) has been quite widespread since the 1980s, this has to be distinguished from e-HR for two key reasons. First, HRIS is focused on automating the systems used by the HR function itself; thus its main 'customer' has been HR staff rather than employees or managers. Second, the use of HRIS has not enabled HR to create the type of internal virtual value chain discussed earlier, thus creating a new HR business model. So, for example, HRIS has concerned itself with automating systems such as payroll and personal information, usually with little or no attempt to make such data interactive or available to staff outside of HR. In contrast to HRIS, e-HR is concerned with the application of Internet and web-based systems, and increasingly, mobile communications technologies to change the nature of interactions among HR staff, line managers and employees from a pure face-to-face relationship to one that is increasingly mediated by such technologies (Ruel et al, 2003). In doing so, it helps create the internal HR virtual value chain: this parallels the physical internal HR value chain that already exists, replacing or complementing face-to-face relationships and HRIS with a 'smart self-service relationship', customized content and greater individualization of services.

Modelling e-HR. There has been little attempt to-date to provide overall theoretical frameworks for explaining e-HR adoption; two notable exceptions are Shrivastava and Shaw's (2004) stage model and Ruel et al (2004) who made use of the 'Harvard' model of HRM developed by Beer et al (1984) to link e-HR to HR outcomes. We have attempted to combine some of the strengths of both of these with other work we have done in the field (Martin, 2005; Reddington et al., 2005; Martin, et al., forthcoming) to produce a framework designed to explain the links between HR strategies, e-HR strategic drivers, e-HR technologies and e-HR outcomes (see figure 1). The basic elements of the framework are described in the following paragraphs.

The *HR strategies and policies* of an organization interact with its strategic environment and corporate and business strategies, often in a complex, two-way relationship. Outside-in approaches to strategy stress the linear and hierarchical relationships in which HR strategies are deemed to flow from key corporate and business strategies as second or even third order strategies (Boxall & Purcell, 2003). In contrast, the resource-based view (RBV) stresses a more inside-out relationship, with HR strategy shaping or even driving key corporate and business strategies, especially in industries and sectors that trade on knowledge, reputations and brands (Boxall & Purcell, 2003; Lado, et al., 2006; Martin & Hetrick, 2006). By HR strategies, we mean the dominant strategies on workforce development (level and nature of investment in human capital stocks and flows in internal and external labour markets), the nature of HR supply chain management (e.g. in-house v outsourced) and decisions on employer-employee interdependence (i.e. investment in social capital, employment security and the nature of psychological contracting) (Martin et al, forthcoming; Whately, 1999; Wright et al , 2003).

The *strategic drivers of e-HR* flow from HR strategies and policies. These drivers have been classified in terms of *transactional* goals, including reducing the costs of HR services and HR headcount, and improving service delivery to managers and employees. Increasingly, however, some organizations are seeking to secure more *transformational* goals, including freeing up time for HR staff to address more strategic issues rather than basic administration, and by transforming the contributions that HR can provide to the organization (its 'business model'). These involve extending its reach to more remote parts of the organization to create a sense of 'corporateness' or internal integration in extended enterprises (e.g. through HR portals); enabling more sophisticated recruitment searches (e.g. through deep-web mining to uncover people not actively seeking jobs) and (self) selection through online tools; facilitating deep learning in communities through online interactions; increasing the 'IQ' of the extended enterprise through organizational learning and knowledge; creating new forms of organizational community and methods of communications through new forms of social software, e.g. interactive employee engagement surveys, virtual communities of practice, 'blogging', 'wikis', etc; and creating greater choice in how people work and in work-life balance through remote and virtual working (Martin, 2005; Reddington et al., 2005).

The extent to which an organization focuses on any or all of these goals should, in theory, influence the types of *e-HR architecture* it adopts, though such adoption will be moderated by the *absorptive capacity of HR* to seek out knowledge about and exploit these architectures to the full (Zhara & George, 2002; Martin, et al, 2006). It will also be moderated by levels of *HR competence* in ICT and business and management. Rather than use the more conventional classification of e-HR technologies, we have borrowed the concept of a technology architecture from the Ideas of Galliers and Newell (2003), who used the term to describe how flexible socio-ICT systems can dynamically respond to changing information requirements during ICT implementation projects. It is thus a broader notion than e-HR technologies because it incorporates not only *HR data, systems and technologies* but also *how these are sourced* (i.e. whether this is sourced internally or externally through contractors or business partners) and *the accompanying human resources infrastructure and resources* (i.e. the configuration of HR roles for providing e-HR services, how they and the HR organization interacts with the new technologies, levels of e-HR skills and capabilities, HRs' potential to adapt and develop the e-HR technologies, and the resources they are given to do their jobs, including the sponsorship from senior management). For example, some companies have set up new shared services centers that retain certain HR services in-house and applied e-HR solutions to them, while simultaneously outsourcing major applications such as pay and pensions. The organization of roles in these new HR service centers can mean that certain HR staff work almost exclusively through information and communications technology-mediation, requiring them to master new online and telephony skills rather different from the face-to-face interactions they have been used to. Often the technologies they use determine how they work, leaving little room for

them to adapt the systems, though certain of these systems are deliberately designed to be more flexible and amenable to user adaptation.

Thus, we can classify e-HR architectures according to the three dimensions discussed earlier in describing the e-HR value chain. The first draws on the classification of e-HR goals, that is whether the architecture draws on *operational technologies and operational skills demands of HR* (e.g. HRIS and basic ICT skills), *relational technologies and HR skills* (e.g. manager self-service (MSS) and employee self service systems (ESS) and HR portals, etc, accompanied by skills in using technology mediated HR transactions) and *transformational technologies and HR skills* in areas such as sophisticated search technologies, online survey tools, career development tools, human capital management systems, social software, e-learning and knowledge management platforms, virtual meetings software, etc). The second dimension relates to how these technologies and skills are sourced. There is increasing use of outsourcing of e-HR to contractors, often for reasons of cost and levels of expertise. How such relationships are experienced by both parties and managed can have important consequences for the outcomes of e-HR implementation. The third dimension refers to how internal and external HR-related staff and organizations interact, formally and informally, with these technologies, and their levels of existing skills and potential for developing these socio-technical systems.

The notion of absorptive capacity of the HR function is also potentially important (Martin et al., 2003; 2006). Absorptive capacity in this context can be defined as the *potential* for the HR function, supported by ICT specialists, to acquire and assimilate knowledge about e-HR technologies and its uses into their vision for a changed HR function (Zhara & George, 2002; Jansen et al., 2005). It can also be defined in terms of the capacity of the HR function to *realize* e-HR potential, the first stage of which is to transform e-HR technologies by developing them and fusing them with existing HR processes. One of the major debates in the practitioner world is whether e-HR technologies should be adapted to existing or revised HR processes (customization) or whether HR processes should be adapted to fit usually bought in technologies (the 'vanilla' solution). Evidence to date suggests that the vanilla solution is winning out because of the difficulties in changing existing e-HR technologies at reasonable cost (Shrivastava & Shaw, 2004). This realization phase is also marked by the ability of the HR function to combine face-to-face and technology-mediated HR approaches to produce a new business model for HR previously discussed; that is, e-HR's ability to transform what it can currently do with available knowledge and technology into a more strategically oriented function that addresses the key strategic drivers of the organization (Huselid, et al, 2005).

Finally, the adoption of specific e-HR architectures should lead to specific *e-HR outcomes*, though these outcomes will be moderated by the *change models* and approaches adopted (top-down v bottom up, the pace of change, 'incrementalism' v 'big-bang', the nature of strategic narratives for change), including the competence of HR to manage such change effectively. It is also moderated by factors influencing *user acceptance* (Fisher & Howell, 2004), including architectural systems design decisions, factors affecting employee and manager reactions to the e-HR technologies (individual characteristics and situational characteristics) and intended or unintended user reactions to the architecture. Drawing on the existing literature and our research findings from preliminary case work, we have set out these e-HR outcomes in Table 1. Note that e-HR outcomes can be both intended or unintended, and also positive or negative: much of the existing literature has focused on the benefits of e-HR adoption, but it becoming increasingly recognized that there are potentially negative consequences from e-HR adoption for HR staff and their internal clients, especially if the issues connected with change management and technology acceptance are not handled effectively (Reddington et al, 2005; Ruel et al, 2004, Martin et al., 2006). It should also be noted that the positive and negative classification will sometimes depend on where one stands; a good example of this is headcount reduction of HR, which is often used as a justification by the organization for e-HR but has potentially damaging consequences for organizational knowledge as well as those HR staff displaced by the reduction.

Figure 1: Modelling e-HR

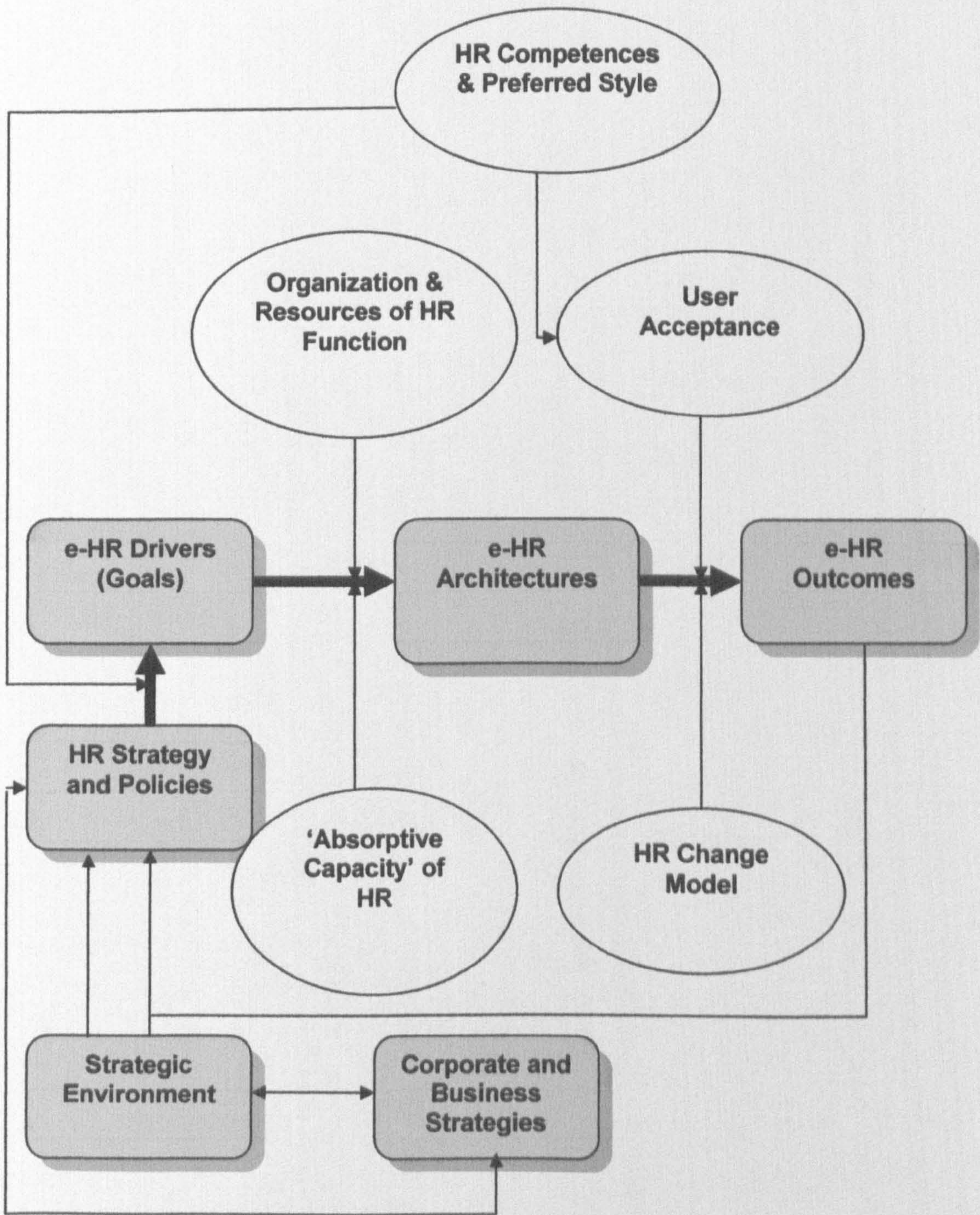


Table 1: Classifying e-HR Outcomes

	Positive	Negative
Intended	<p>Transactional Reduced costs of HR transactions and HR headcount reduction Greater responsiveness to needs of managers and employees' needs for (real-time) information and tailored HR solutions on demand Increased self-efficacy among managers and employees</p> <p>Transformational Greater accountability of managers for people management Increased acceptance of self-development by employees Improved talent management through self-selection, self-assessment, performance management, etc Improved two-way communications leading to higher levels of organizational engagement and satisfaction with HR/people management Greater access to individual learning Greater capability to feed forward individual learning into group and organizational learning across distributed organizations Greater sense of corporate identity through uniform HR portals More time for HR to focus on expert/strategic issues Greater ability to work flexibly from home, and other workplaces</p>	<p>Transactional HR headcount reduction</p> <p>Transformational Lack of face-to-face contact and remoteness of HR staff from 'clients' Intellectual property and data ownership transferred to outsourcing partner</p>
Unintended	<p>Transactional Spillover of information from HR into other areas of business</p> <p>Transformational Greater sense of organizational innovativeness/progress modelled through adoption of sophisticated e-HR</p>	<p>Transactional Displacement of existing HR staff and loss of organizational knowledge Lack of job satisfaction among HR staff working in shared service centres Manager/employee frustration over ease of use and value of information Resistance to new ways of working through 'benign neglect', opposition or mild forms of sabotage Increased levels of cynicism with HR/organizational change programmes Increased perception by managers of 'doing HR's job' and work overload</p>

Case Study Setting and Data Collection

In this next section we illustrate key aspects of our theoretical framework drawing on data collected by the first author during an investigation into an e-HR implementation in UK based operations of a leading global oilfield services provider. We follow the logic of our model in Figure 1 by describing the strategic environment, the corporate strategy of the company and business strategies and culture of two strategic business units (SBUs) studied as part of this investigation. Next we describe the method of data collection and the nature of the e-HR architecture. In the final section, we set out the results on e-HR outcomes and technology acceptance by line managers in both of the SBUs, hereafter referred to as 'subsidiary A' and 'subsidiary B'.

The Case Study Context: The Strategic Environment, Corporate and Business Strategies and the HR Function.

Since the 1920s, the parent company had grown both organically and through acquisition into a major international company employing 64,000 staff in eighty countries. To create high levels of customer service it depended on high levels of international team working and knowledge sharing. This reliance on knowledge and technology caused them to describe themselves not only as a leading oilfield services provider but also as information systems specialists, who could support their customers by translating data into useful information, and then transform this information into knowledge for improved decision making around the globe. Given their strategy of creativity, collaboration, and high levels of customer intimacy, the levels of understanding of customers' needs, managing international diversity and knowledge sharing required a great deal of international teamwork. Thus, the espoused values of the parent company were built around 'people being the organization's greatest asset'. Employees were to be supported by excellent technology to deliver sound profits for shareholders, requiring a high proportion of the organization's profits to be retained for R&D investment in the twenty-three research and engineering facilities worldwide. The organization also embraced a geocentric international staffing policy in which the selection and deployment of managers reflected a balance between (a) the needs for differentiation and sensitivity to the cultures and institutions of the host countries in which they operated and (b) the needs for integration with the corporate values of the parent company (Gooderham & Nordhaug, 2003; Perlmutter, 1969)

Thus, given this innovation strategy and 'glocalized' staffing policy, the HR function was seen as crucial to the development of international team working and knowledge sharing. The HR function had a crucial role in developing culturally –sensitive management and in so doing was required to shed its administrative workload to concentrate on culture management and change issues. However, the company was also keen to see HR embedded into the business and historically had adopted a policy whereby HR managers and line managers would regularly interchange to carry out each others' roles. Thus the HR function was being gradually transformed into a more strategically-oriented function, in which HR staff worked more closely with managers in the new operating structure.

To achieve this, the HR function was firstly divided into the now common shared services (Employee Services) and business partner model (Ulrich & Brockbank, 2005). Employee Services provided administrative and policy support with HR business partners providing direct support to business-facing managers in the field. Secondly, Employee Services adopted a global HRIS to allow it to become more efficient and effective in providing globally-available data for all service lines and all business groups from the same database. This allowed consistency and integration of performance management and other HR practices and policies throughout the company. Thirdly, e-HR was introduced to improve service delivery by opening up the access to the HRIS using manager and employee self service applications.

e-HR Drivers

Thus, the strategic drivers of e-HR of the parent organisation were primarily concerned with improving service quality and freeing up time for HR staff to address more strategic issues rather than basic administration. First, these goals were to be achieved through the development of a common HR portal, through which all on-line services could be accessed. The intention of this portal was also to help HR to create a greater sense of corporate identity among employees in the extended enterprise using an internal employer branding strategy (Martin & Hetrick, 2006). Second, the company implemented a global HRIS, comprising a set of basic information systems and the first set of e-HR tools. These relational technologies were a combination of 'out of the box' applications, derived from the global HRIS, combined with bespoke tools, many of which were developed in house.

The parent company's internal analysis had shown that the cost savings over the first two years did not offset the cost of implementation. The real benefit being sought was an improvement in HR service quality, providing more accurate and reliable data, and enabling more informed

management decisions. The company, however, had a longer term transformational goal of introducing ICT to improve human capital management through the development and introduction of a bespoke global 'career centre'.

HR functions were aligned with national operating companies, with service centers established to handle transactional enquires from line managers and employees. The emphasis was on the internal sourcing of HR technologies, unless a compelling case could be made for outsourcing of services.

Data collection

The research into the effectiveness of the e-HR initiative was carried out during 2004. Two contrasting, UK based SBUs were chosen to enable within-case analysis, especially to examine the influence of context on the implementation of e-HR. Subsidiary A supplies a wide range of services including directional drilling, consulting and IT infrastructure services while subsidiary B provides comprehensive reservoir imaging, monitoring and development services. The underlying and most important difference between them was that A has a long history of being part of the parent company, whereas B had been acquired a few years prior to the research. Consequently, the culture and organization of both subsidiaries and the relational attitudes with the parent company were quite distinct. Subsidiary A was a well-established and well-integrated part of the corporation and relations between parent and unit managers were mature. As one respondent commented:

At (subsidiary A) you've got more or less a lot of people who have grown up (with the parent company) and as such I would say that could explain some of the difference (with subsidiary B)' (Line Manager from A)

Subsidiary B, not having been fully integrated into the corporation, had less mature relations between parent and unit managers, as illustrated by a comment from another respondent:

there is a stigma in (subsidiary B) in a sense that there are many diverse organizations located there.... because there is a much more diverse range of people working, I don't think you have the same level of bonding. (Line Manager from B)

These differences were exacerbated by recent redundancies at B, which caused line managers to be highly skeptical of HR initiatives in general, since they were heavily implicated in the redundancies. A further important difference was that A had a stable nucleus of managers co-located at a small number of sites, whereas the managers at subsidiary B were mostly dispersed and located at a wide variety of clients' premises to carry out their assignments.

Further contrasts related to the sophistication of the HR function in the two subsidiaries: A also had a better developed HR function with a higher ratio of HR business partners to line managers than B. Moreover, line managers in A had previous positive experience of the initial e-HR tools on which to base their expectations. As one manager from A suggested:

I'm not familiar with the organizations in (subsidiary B), but I know (subsidiary A) is where there's a large number of international staff who have used these tools on an international basis and I certainly used them when I was in the States for 3 years and they were beneficial

The research comprised two stages of data collection. The first tranche of data were collected using a web-based survey of line managers. The total number surveyed was ninety three: forty managers responded, yielding a response rate of forty-three percent. Respondents were also split almost 50:50 from the two sites. The survey was designed to elicit information on three aspects of the e-HR implementation, including line managers' views on the effectiveness of HR management roles and responsibilities, e-HR Tools and usage, and the effectiveness of communications, support and training connected with the e-HR system (see Appendix 1 for a list of illustrative survey questions). This survey was followed up by nine interviews with line managers (six from A and three from B, proportional to their respective sizes) to probe some of the findings of the survey.

Results

Table 2 provides a summary the results of the questionnaire on three dimensions: satisfaction with HR roles and responsibilities; satisfaction with the e-HR tools, their perceived value and ease of use; and satisfaction with change communications and training for e-HR. The results are based on a simple aggregation of percentage of favorable responses to each of the questions corresponding to the three dimensions since it is not possible to undertake any sophisticated statistical analysis on such small samples. The favorable percentages combine the favorable/agree and very favorable/strongly agree scores; the middle percentage represents neutral scores, while the unfavorable percentages combine the unfavorable/disagree and highly unfavorable/strongly disagree scores.

Table 2: Results of web-based survey among line managers on e-HR Implementation

Dimension	Aggregate responses ^a			Subsidiary A response			Subsidiary B response		
	F	N	U	F	N	U	F	N	U
HR roles and responsil	66	21	13	74	17	9	51	31	18
e-HR tools and use	60	22	18	68	18	14	43	29	28
e-HR communications, support and training	51	22	27	58	22	20	37	22	41

Comparison of means between subsidiaries A and B shows significant statistical differences between the attitudes of line managers on each of the three dimensions, with subsidiary A being much more positive about all aspects of the e-HR implementation and the role of HR. Correspondingly, responses in subsidiary B were significantly more unfavorable on all three aspects of the e-HR implementation and the role of HR.

The findings from the interviews provided some insights into the extent of favorable and unfavorable responses to the e-HR initiative, and into the reasons why managers in the two companies should have displayed different attitudes. Tables 3 and 4 provide a classification of the positive and negative outcomes (intended and unintended) from subsidiaries A and B, together with some illustrative quotations from the interviews. Table 3 refers to interviews with managers from subsidiaries A and B on positive outcomes; Table 4 refers to interviews with managers from subsidiaries A and B on negative outcomes.

Table 3: A Classification of Positive Outcomes of e-HR arising from Interviews with Subsidiaries A and B

Intended	Category	Description	Illustrations from Interview Data
	HR Policy Information	Access to accurate and consistent HR policy information assisted decision making	<i>"On HR Policy Information, it's clearly defined so we know what the rules are, which I believe are quite good, so knowing where we are going is important." (Line Manager from A)</i>
	Career Centre	On line career tool permitted each manager to interrogate an internal database of employee CVs and establish a potential shortlist of candidates for vacant positions	<i>"I think the Career Centre is very good in that we have the ability to look and find people in their particular skills sets through a system. I think it gives the company a good starting point to find or fill the varied opportunities that we have throughout the world." (Line Manager from B)</i>
	Performance Data	On line access to performance assessments for each team member enhanced the efficiency and quality of the Performance Management and Reward processes	<i>"So for the performance data, obviously the Sheer power of being able to see your staff performance over say the last 3 or 4 years and observe how well they've been doing at the click of a button; it's just fantastic, compared to previously where it was a case of 'who you know'." (Line Manager from A)</i>
	Compensation Data	On line access to compensation data for each team member enabled managers to assess the distribution of compensation levels and informed the Performance Management and Reward processes	<i>"Compensation Data - very important. We used to have huge trouble to find out where people stood compared to each other etc. Having the power to be able to extract this information yourself and again, once you know how, it becomes fairly easy." (Line Manager from A)</i>
	Management Guidance	On line access to management guidance – a form of assistance to help managers with the HR aspects of their role.	<i>"..because managers do not have significant personal contact time with their line Managers, remotely accessed management guidance through e-HR is helpful." (Line Manager from B)</i>
Unintended	Reduced HR Admin Support	Line manager perception that reduction in HR headcount is good for the organization	<i>"..personnel administrators, etc, are a support function... we want people who generate revenue so if we can reduce that number of people and keep revenue generators, then you know, let's go that way." (Line Manager from A)</i>

Table 4: A Classification of Negative Outcomes of e-HR arising from Interviews with Subsidiaries A and B

Unintended	Category	Description	Illustrations from Interview Data
	Lack of Clarity of Roles	Managers not adequately Consulted about devolution of responsibilities and unclear about their roles.	"They [HR] did not explain the implications about putting the tools in place and what was going to happen." (Line Manager from A)
	Lack of Adequate Preparation in Training and Skills	Line managers insufficiently Skilled to carry out people management practices	"The training is terrible, it's really poor because if that information is available at our finger tips through decent training, then the load we would take off the personnel administrators who spend lots and lots of time answering stupid questions." (Line Manager from B)
	Increased Workload	Extra pressure on hard pressed line managers	"So when you say the phrase 'e-HR', it makes me very nervous that, in five years time, we will be expected to have one or two HR people to run the whole of UK company and the line manager will be expected to spend all his or her time hoofing through spread sheets, web-pages or data bases to find information or to do everything on their own." (Line Manager from A)
	Lack of Support from HR	Lack of skills in HR adopting their new role may limit the success of devolution	"I suspect there are such a lot of very young people with not so much experience in some of the key HR functions and these people don't know how things are working sometimes, they don't understand what we are doing." (Line Manager from A)
	Lack of Institutional and Personal Objectives	HR activities taken less seriously than production or service goals	Most of the targets are business oriented rather than people oriented...so I can achieve all my[business] targets but still have a completely de-motivated team" (Line Manger from B)
	Poor Communication	Infrequent, poor quality communications	"I don't think we receive that many communications about many of the HR tools or opportunities to use data....I think it almost feels like there's a black hole out there, with a lot of information in it and there's nothing coming out or there's no way of getting in to get that information." (Line Manager from A)
	Poor Access	Limited or slow access to e-HR caused by technical considerations	"They [subsidiary B managers] are very much isolated as individuals...they're not on the [parent company] network...so if they need to get to any of the tools or HR stuff that's on line, they need to dial in and get it and the connection's not as good and it's not as quick." (Line Manager from B)

Discussion and Conclusions

The contribution of this paper mainly lies in the development of a theoretical framework linking e-HR strategy to e-HR outcomes, showing its relationship to key antecedent variables, such as HR strategy and organization as well as contextual variables such as business strategy and the business environment. The framework also highlights important moderating variables such as technology acceptance and change models. The model was derived from our knowledge of the extant analytical and prescriptive literature in this emerging field and from cognate literature on information systems and strategy. It has also been developed inductively from case research we have been carrying out over the last three years: data from these cases have helped produce some of the categories of explanation for the model; in turn, the model helps organize and explain the data. In that sense it is grounded theory. Consequently, it can be used as a starting point for a framework for analyzing data on e-HR implementation and normatively as a guide to practitioners who are embarking on this process for the first time.

As to the data in our case, these are not meant to be a test of the model; rather they have contributed to its development and help illustrate some of its essential features and explanatory power. However, these data also show where further development and 'complexification' in theorizing might be needed. There are two areas we wish to reflect on in the light of evidence for the case and writing this paper. The first of these is the need for more dynamic rather than linear models of e-HR, while the second is for a better discussion of context.

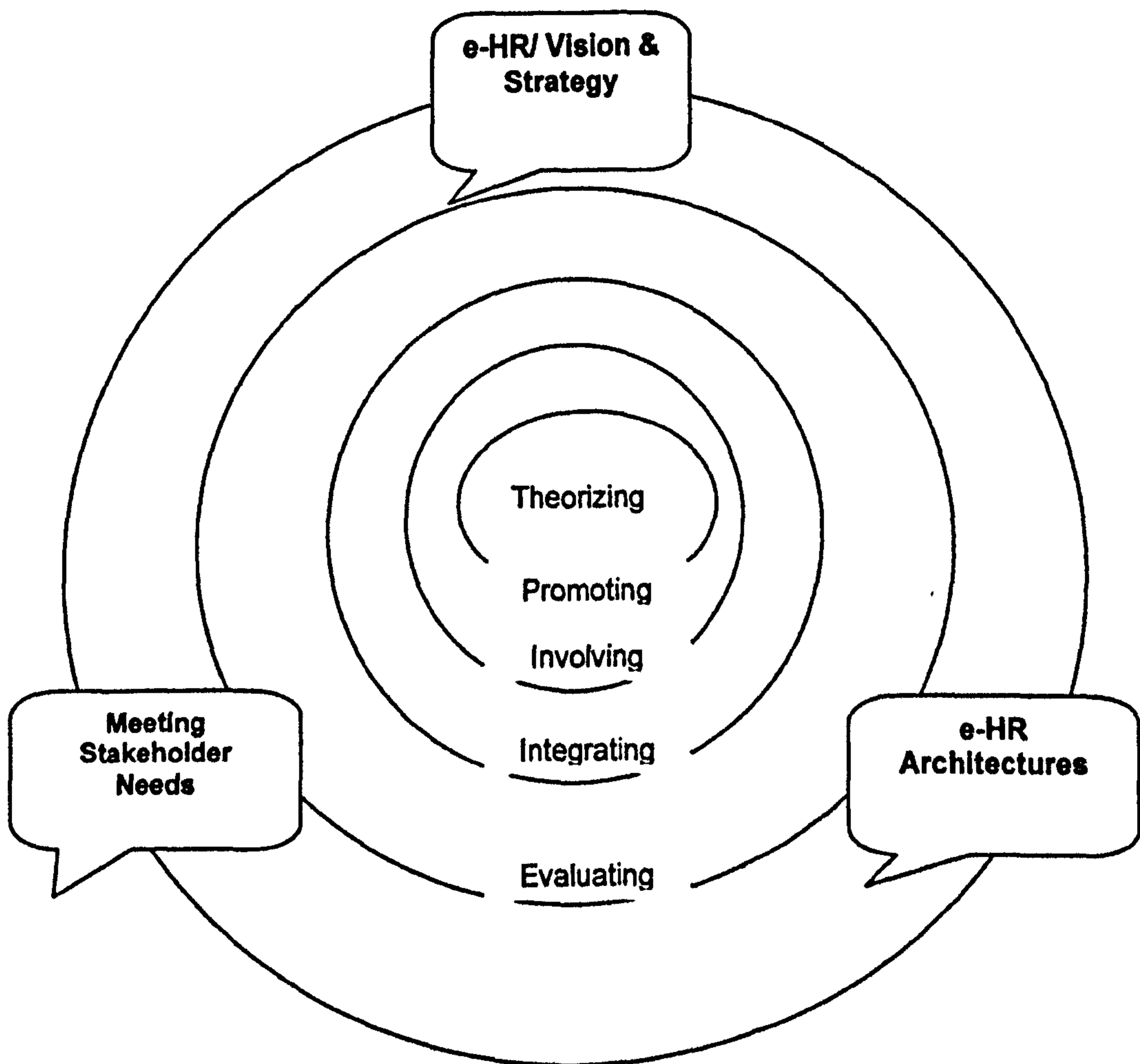
Linearity and Process Models. Criticisms of linear models of organization change have been well documented in the strategic management literature and literature on strategic HR (Martin & Beaumont, 2001). Linear models fail to give sufficient emphasis to processes of change, to the complex interactions among variables and to implementation of changes over time. Consequently, they are often of less help to practitioners, precisely because they attempt to be parsimonious simplifications of the real world for the purposes of academic testing. Our experience from previous case research and our data from this case suggest that the model might be extended to embrace a more process orientation involving cycles of e-HR implementation. This conclusion is also based on strategic change research undertaken in related fields of organizational behavior and HR (Martin & Beaumont, 2001; Schultz & Hatch, 2003). Thus we propose that creating effective e-HR strategy that reconciles transaction drivers with transformational drivers might be summarized as cycles or stages in the design and implementation of the moves towards an e-enabled HR strategy. We propose at least five cycles of change that bring together three key variables: the overall e-HR vision and strategies, the configuration of e-HR architectures, and the e-HR outcomes specified in terms of meeting stakeholder needs (see Figure 2). This cyclical process suggests a more dynamic and iterative relationship between an emergent e-HR strategy, HR technologies and the ability of managers, employees and HR staff to adapt these technologies in line with the notion of a socio-technical architecture. The cycles are as follows

Table 5: Cycles of the e-HR Process

Cycle 1: Theorizing	Theorizing the need for HR change
Cycle 2: Promoting	Having key champions accept the message of change and actively promote it to line managers and employees
Cycle 3. Involving	Involving all relevant stakeholders, including HR service centre, Business partners, line managers and employees
Cycle 4. Integrating	Ensuring the line managers and employees derive expected and unexpected value from the e-HR changes,
Cycle 5. Evaluating	Monitoring the results through measuring the outcomes of the e-HR implementation.

From a practitioner perspective and following the Schultz and Hatch model, this type of theorizing also points to useful forms of gap analysis during each cycle of implementation of e-HR. Thus for example, practitioners would need to have investigated the alignment between their vision and strategies for e-HR, the types of architecture they have initially decided to implement and the stakeholder needs they wish to stress during the theorizing cycle. Similarly, they would need to investigate the alignment (or gaps) between the revised vision, architectures and attainment of stakeholder needs during the evaluation cycle.

Figure 2: e-HR as the Implementation of Cycles.



Context

It has almost become axiomatic that context matters in organizational change and HR research for a number of important reasons. The first is that if we do not understand the situation on which individual and group behavior occurs, then we cannot explain person-situation interactions, which is one of the key foci of organizational studies (Johns, 2006). As the data in our case illustrate, positive and negative outcomes of the e-HR implementation can be largely attributed to the difference in the contexts of the two subsidiaries; in A there was a receptive context for change in the form of a longer history of integration into the corporate culture, a higher ratio of HR business partners and, most importantly, an apparently positive experience of previous e-HR tools; in B the context was of a recently acquired company, lack of cultural or corporate integration and lack of experience with e-HR tools. In previous work, one of us has set out the importance of different levels of context at a cross-level effect (Martin & Beaumont, 2001), especially as it applies to strategic HR changes in multinational companies. Two of the most relevant levels of context that help explain the results in this case are: (a) the organizational context, which refers to the cultural distance between the parent company and the subsidiaries, the attitudes of managers to learning and change, and compatibility of practices between the parent and subsidiary companies and (b) the relational context, which refers to the attitudes of the parent company managers to subsidiary managers and employees and the dependence of the subsidiaries on the parent company for resources. Though we have some understanding from this case of organizational contextual differences and on the attitudes of the parent company to the subsidiaries, one of the limitations of this work is our lack of data that illuminate differences in dependence on these subsidiaries on the parent for survival, though we are able to speculate from the redundancy decisions.

There is, however, another way in which context matters in management research, as John (2006) has also pointed out. This lies in the ability of research to be helpful to managers and to resonate with their experience. Much of the current literature in the field focuses on variance theories

that underplay or understate the influence of context and are often criticized for being acontextual and ahistorical. As such, this type of work fails to convince managers that researchers understand their specific environments (Pettigrew & Whipp, 1991); for example, the redundancy situation in subsidiary B. Consequently, one of the most useful avenues for future research may be to identify receptive contexts for e-HR implementation at both the organizational and individual level, which is where our research is taking us now.

Appendix 1: Illustrative Survey Questions

Dimension	Illustrative questions
Personnel Management Roles and Responsibilities	<ul style="list-style-type: none"> a. HR management responsibilities are clearly defined in my organisation. b. I have a clear understanding of my own people management responsibilities. c. Allocation of people management responsibilities between HR and Line Managers is clearly delineated in my organisation.
e-HR Tools and Use	<ul style="list-style-type: none"> a. e-HR offers significant benefits to me, as a manager. b. e-HR is easy to navigate. c. Even with e-HR, I have to spend too much time on HR administration, in my manager role.
e-HR Communication, Support and Training	<ul style="list-style-type: none"> a. Communications I receive regarding e-HR are useful to me. b. I received sufficient initial training on e-HR to give me a head start in using the tools. c. Additional training would be helpful in enabling me to get the most out of e-HR.

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Appendix 2: Schlumberger Statements, Dimensions, Mean Values and Ranks

Statement	Dim	A	Rank	G	Rank
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
Personnel Managers' responsibilities are clearly defined in my organisation	D1	2.04	13.0	2.5	13.0
I have a clear understanding of my own people management responsibilities	D1	1.57	3.0	1.79	2.0
Allocation of people management responsibilities between personnel and line managers is clearly delineated in my organisation	D1	2.13	15.5	2.93	25.0
Personnel Managers' roles and responsibilities are clear to me as a manager.	D1	2.39	24.0	2.86	22.5
Employee Services' roles and responsibilities are clear to me as a manager	D1	2.48	28.0	2.15	7.0
Personnel Managers and Employee Services provide valuable service to me as a manager	D1	2.0	12.0	2.79	21.0
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
e-HR provides me with the personal information I need as an employee	D2	2.26	19.5	2.75	20.0
e-HR provides me with the Personnel management information I need as a manager	D2	2.35	21.5	3.33	33.0
e-HR is easy to navigate	D2	2.26	19.5	3.17	29
I can easily find the Personnel management information I need through e-HR	D2	2.52	31.0	3.42	37.0
I personally like the look and feel of e-HR	D2	2.48	28.0	3.00	26.0
For each of the e-HR tools listed below, please choose the one option that most accurately reflects your own view of their usefulness to you.					
Career Centre	D2	1.52	1.5	1.86	3.0
Flexible Benefits	D2	2.13	15.5	2.23	9.0
Performance Management	D2	1.52	1.5	1.43	1.0
Employee Self Service	D2	1.95	10.0	2.67	16.5
Manager Self-Service	D2	1.82	5.0	2.70	19.0
For each of the statements listed below, please choose the one option that most accurately reflects your own view of their usefulness to you.					
e-HR offers significant benefits to me, as an employee	D2	2.39	24.0	3.08	27.0
e-HR offers significant benefits to me, as a manager	D2	2.39	24.0	2.92	24.0
e-HR saves me time, when seeking Personnel data applicable to me as an employee	D2	2.65	33.0	3.15	28.5
e-HR saves me time, when seeking Personnel data I need in my manager role	D2	2.48	28.0	3.23	31.5
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
Communications I receive regarding e-HR are useful to me.	D3	2.91	39.0	3.77	39.5
On-line help provided through e-HR is useful to me.	D3	3.17	41.0	3.77	39.5

Statement	Dim	A	Rank	G	Rank
I received sufficient initial training on e-HR to give me a head start in using the tools.	D3	3.87	43.0	4.57	43.0
The training I have received on e-HR makes me comfortable in using the tools	D3	3.74	42.0	4.46	42.0
Additional training would be helpful in enabling me to get the most out of e-HR	D3	2.86	40.0	2.62	35.5
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement					
e-HR meets my needs as a manager	D2	2.65	33.0	3.38	35.5
e-HR meets the business needs of my team	D2	2.82	36.5	3.54	38.0
e-HR has increased the effectiveness of HR management throughout my organisation	D1	2.65	33	3.23	31.5
Even with e-HR, I have to spend too much time on HR administration, in my manager role	D2	3.3	35.0	3.31	18.0
Enhanced functionality from e-HR could reduce my HR administration time	D2	2.35	21.5	2.62	14.0
For each data category listed below, please choose the option that most accurately reflects your own views of data quality					
Personal employee data (e.g., dates of birth and joining; family data, home address information)	D2	1.94	7.5	2.44	11.5
HR Policy Information	D2	1.94	7.5	2.44	11.5
Individual performance data	D2	1.95	10.0	1.90	4.0
Individual compensation data	D2	1.93	6.0	2.17	8.0
Manager guidance and help	D2	2.15	17.0	2.00	5.0
Team information and data	D2	2.40	26.0	2.40	10.0
Other HR management data	D2	2.25	18.0	2.67	16.5
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
HR should monitor and audit personal data to assure that it is being properly maintained by employees.	D1	1.68	4.0	2.14	6.0
Individual employees should be held accountable for maintaining their own personal data.	D1	2.05	14.0	3.21	30.0
Individual employees who neglect their personal data maintenance responsibilities should be penalised.	D1	2.82	36.5	4.36	41.0
As a manager, I personally take steps to be sure that the members of my team are keeping their personal data up to date.	D1	2.50	30.0	2.86	22.5
All managers should be held accountable for their team members' maintenance of personal data.	D1	2.86	38.0	3.36	34.0
Employees should be responsible for maintaining their own data	D1	1.95	10.0	2.64	15.0

Subsidiaries: A= Aberdeen; G = Gatwick. Dimensions: D1 = Personnel Management Roles and Responsibilities; D2 = e-HR Tools, Perceived Usefulness and Ease of Use; D3 = Change Communications, HR Support and Training for e-HR. Scale: 1 = agree/satisfied/accurate; 2 = mostly agree/satisfied/mostly accurate; 3 = neither agree/disagree; 4 = mostly disagree/dissatisfied/too many errors; 5 = disagree/dissatisfied/awful.

Appendix 3: T-Mobile Statements, Dimensions, Mean Values and Ranks

Statement	Dim	LM	Rank	HR	Rank
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
e-HR provides me with the personal information I need as an employee	D1	2.11	6.0	1.60	16.0
e-HR provides me with the Personnel management information I need as a manager	D1	2.30	14.5	2.00	28.0
e-HR is easy to navigate	D1	3.11	46.0	2.20	34.0
I can easily find the Personnel management information I need through e-HR		2.78	37.5	2.40	38.5
I personally like the look and feel of e-HR	D1	2.91	41.0	2.40	38.5
For each of the e-HR tools listed below, please choose the one option that most accurately reflects your own view of their usefulness to you.					
Career Planning Site	D1	3.41	48.0	2.80	44.5
Peopleclick	D1	2.41	18.0	1.80	22.0
Performance Management Site	D1	2.63	30.0	1.60	16.0
Employee Self Service	D1	2.13	7.0	1.60	16.0
Manager Self-Service	D1	1.98	5.0	1.20	4.5
24@T-Mobile	D1	2.23	9.5	1.20	4.5
HR Direct	D1	2.23	9.5	1.40	9.5
For each of the statements listed below, please choose the one option that most accurately reflects your own view of their usefulness to you.					
e-HR offers significant benefits to me, as an employee	D1	2.35	16.0	2.20	34.0
e-HR offers significant benefits to me, as a manager	D1	2.27	13.0	2.00	28.0
e-HR saves me time, when seeking Personnel data applicable to me as an employee	D1	2.60	28.5	2.40	38.5
e-HR saves me time, when seeking Personnel data I need in my manager role	D1	2.57	27.0	2.00	28.0
e-HR saves costs by reducing the level of personal HR support	D1	2.46	22.0	2.20	34.0
I feel empowered by e-HR to make more decisions without the intervention of the HR department	D1	3.03	42.0	3.00	48.5
I sometimes feel vulnerable in the absence of HR support*	D3	3.10	40.0	3.00	48.5
e-HR allows the HR function to focus more on higher value activities	D1	2.67	31.0	3.20	51.0
e-HR has increased the effectiveness of HR management throughout my organisation	D1	3.05	43.0	3.00	48.5
Even with e-HR, I have to spend too much time on HR administration in my manager role*	D1	2.92	44.0	2.60	52.0
Enhanced functionality from e-HR could reduce my HR administration time	D1	2.30	14.5	1.80	22.0
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
Communications I receive regarding e-HR are useful to me.	D3	2.70	34.0	1.40	9.5
On-line help provided through e-HR is useful to me.	D3	2.70	34.0	1.60	16.0

Statement	Dim	LM	Rank	HR	Rank
I received sufficient initial training on e-HR to give me a head start in using the tools.	D3	3.65	51.0	2.00	28.0
The training I have received on e-HR makes me comfortable in using the tools	D3	3.49	50.0	2.20	34.0
Additional training would be helpful in enabling me to get the most out of e-HR*	D3	2.10	52.0	3.00	48.5
The SAP help desk provides useful support to me when I need it	D3	2.68	32.0	1.60	16.0
The tools are so easy to use that I do not need training	D3	3.44	49.0	2.80	44.5
If I cannot find something on HR Direct, I email 24@T-Mobile	D1	2.44	20.5	1.40	9.5
e-HR saves time for business line managers and HR managers alike	D1	2.70	34.0	2.80	44.5
Enhanced e-HR functionality could pay dividends for the business	D1	2.25	12.0	2.00	28.0
The use of e-HR by business line managers gives me more time to focus on higher level activities	D1	2.78	37.5	2.60	41.5
For each data category listed below, please choose the option that most accurately reflects your own views of data quality					
Personal employee data (e.g., dates of birth and joining; family data, home address information)	D2	1.54	1.0	1.40	9.5
HR Policy information	D2	2.24	11.0	2.20	34.0
Individual performance data	D2	2.22	8.0	1.20	4.5
Individual compensation data	D2	1.97	4.0	1.00	1.5
Manager guidance and help	D2	2.37	17.0	1.80	22.0
Team information and data	D2	2.60	28.5	1.00	1.5
Other HR management data	D2	2.48	23.5	1.80	22.0
For each of the statements below, please select the one option that most closely reflects your own view and agreement or disagreement with each statement.					
HR should monitor and audit personal data to assure that it is being properly maintained by employees.	D2	1.57	2.0	1.60	16.0
Individual employees should be held accountable for maintaining their own personal data.	D2	1.63	3.0	1.20	4.5
Individual employees who neglect their personal data maintenance responsibilities should be penalised.	D2	2.75	36.0	1.60	16.0
As a manager, I personally take steps to be sure that the members of my team are keeping their personal data up to date.	D2	2.43	19.0	2.00	28.0

Statement	Dim	LM	Rank	HR	Rank
All managers should be held accountable for their team members' maintenance of personal data.	D2	2.79	39.0	1.80	22.0
HR Direct is my first port of call to answer my HR queries	D1	2.55	26.0	2.80	44.5
The majority of the time I am successful in finding the information I want on HR direct	D1	3.14	47.0	2.40	38.5
24@T-Mobile answers my queries quickly and reliably	D1	2.48	23.5	1.40	9.5
I never use the phone to contact HR	D3	3.09	45.0	2.60	41.5
I understand the e-HR channels available to answer my queries and I use them effectively	D1	2.52	25.0	2.00	28.0
If I cannot find something on HR Direct, I email 24@T-Mobile	D1	2.44	20.5	1.40	9.5

Categories: LM = Line Manager; HR = HR Manager. Dimensions: D1 = e-HR Tools, Perceived Usefulness and Ease of Use; D2 = Data Quality and Maintenance; D3 = Change Communications, HR Support and Training for e-HR. Scale: 1 = agree/satisfied/accurate; 2 = mostly agree/satisfied/mostly accurate; 3 = neither agree/disagree; 4 = mostly disagree/dissatisfied/too many errors; 5 = disagree/dissatisfied/awful. * = reverse logic applies

Appendix 4

Stakeholder Dialogue - Feedback to Participants

Response to HR Managers

The senior members of the e-HR programme team have greatly valued the information generated by the Stakeholder Dialogue Initiative and in particular the amplification of the Key Issues. The Key Issues have been reviewed at the very highest level and the following are the actions and responses proposed at the current time.

- I. The long-term goal for Cable and Wireless Global is the development of a streamlined, truly global and fully e-enabled business.
- II. e-HR is seen as an important enabler of productivity and efficiency and its early and successful implementation is therefore critical.
- III. HR's ability to deliver HR programs and provide leadership that will contribute to the bottom line through the e-enablement and leveraging HR's strategic and consultative skills are a key factor in the early achievement of the corporate goal.

Consequently, it is important that the concerns and issues raised during the Stakeholder Dialogue initiative are addressed and acted upon wherever possible.

Flexibility within the new system

- I. Capturing the effectiveness of global processes is the common goal and local processes and legal variations will be adopted by exception where statutory requirements or compelling business reason so require
- II. It is accepted that not all processes will be e-enabled and that global processes will not capture every HR query and in such circumstances it would be necessary and appropriate to consult with a Business Partner
- III. For remote workers it is intended that the tools to work remotely will be made more available

Role and Function of HR Business Partners

- I. It is acknowledged that the transition to the new e-enabled processes will be a challenging time as employees become familiar with the new global processes and using the on-line technology. However, we need to bear in mind the end-goal of being able to operate at a more strategic Business Partner/Specialist level**
- II. The vision for the Business Partner role going forward has been clearly articulated – the aim is to create a leaner and more efficient HR function with Business Partners focussing on the consultative rather than the transactional element of current roles**
- III. E-HR is designed as an enabling tool to help the Business Partners to operate in the new environment**
- IV. An HR Capability Development Programme has commenced and will run between August and November. It is designed to cover the core capability areas for Business Partners and Specialists and to provide the key building blocks of the Business Partner role including strategy and change, consulting and projects. All Business Partners and specialists should have been invited by their Vice Presidents to join this programme.**

The need to achieve successful implementation

- I. E-HR is the most significant transformation that the company is embarking upon with the potential for far reaching consequences for effectiveness and viability that successful globalisation will help create**
- II. The deployment of new global processes is of critical importance and has been fully endorsed by the main board of Cable & Wireless Global and the full HR Leadership Team.**
- III. In the short term, implementation of e-HR will require time and commitment to become familiar with the processes/on-line functionality. However, the functionality will reduce the transactional nature of the role. HR Business Partners play a key role in supporting the line work in the new environment, to make implementation successful**
- IV. It is acknowledged that there has been less engagement of the business to date than would have been preferred but this has been necessary in order to make sure that HR “Get the Plot” before communication with the line commences**
- V. There is a need for Business Partners to understand e-HR thoroughly before communication to the business takes place**

- VI. "Champions"/Key Sponsors for e-HR will be identified by Vice Presidents from within the business to help effective communication of e-HR to the line

Ensuring efficient use of the system and effective updating

- I. The system will be loaded with as much accurate data as possible to initiate its use and the quality of existing data will be reviewed from time to time
- II. Managers and employees will be responsible for updating their own information and thus ensuring that e-HR functions at its optimal level for the benefit of all users. This is an essential requirement. Employees should update any personal changes through ESS – HR Express, as soon as changes take place.
- III. Managers will need to make sure their own personal data is up to date and also the organisational data that is relevant for their department.
- IV. All potential users of e-HR will be kept fully informed of the steps to implementation and communication and materials will be made available to support the different phases of implementation and the change from completing tasks manually to online
- V. Detailed work is underway to ensure that all potential users of e-enabled services (both managers and employees) are given sufficient support to be able to use the new services with competence
- VI. User workshops will take place and sessions for user acceptance testing will create the opportunity for feedback to the implementation team of any gaps in the system

Buy-in with Line Management and Employees

- I. The need to secure buy-in for e-HR is acknowledged and whilst the benefits of e-HR can be clearly articulated the real challenge for everyone is to ensure that the system delivers what it promises
- II. Responsibility for the technical systems lies with the e-HR Programme Team
- III. Responsibility for HR Transformation lies with the Business Partners and HR Professionals
- IV. Responsibility for data management lies with the user groups
- V. The credibility of HR should be increased if all work together to ensure its success and enable HR to operate at a more strategic level with accurate data

Impact of organisational initiatives and changes

- I. The decision making process around outsourcing has affected the e-HR Programme and will continue to do so until it is fully understood
- II. The implementation of SAP in the UK will be unaffected by the outsource decision
- III. Recruitment and learning tools are currently on hold pending the decision on outsourcing
- IV. Head count and cost reduction remain business decisions, the timing of which are unaffected by the implementation of e-HR

The efforts and input of the HR stakeholders to enable early and effective implementation of e-HR are much appreciated and are vital in optimising the successful role of the UK as part of the global business. Whilst in the short-term workloads may increase and deadlines add pressure, the ultimate goal is to create for the individual whether as part of the HR team or as HR customer, more autonomy, greater job satisfaction and a greater opportunity to contribute to the business moving forward.

The aim of Stakeholder Dialogue has been to create a dialogue between the stakeholders and senior members of the e-HR team about the real concerns and issues the stakeholders may have about e-HR, to gain a deeper understanding of those issues and concerns and to deal with them effectively at an early stage. Thank you to everyone who has taken the time and effort to participate."

Response to Line Managers

The senior members of the e-HR programme team have greatly valued the information generated by the Stakeholder Dialogue Initiative and in particular the amplification of the Key Issues. The Key Issues have been reviewed at the very highest level and the following are the actions and responses proposed at the current time.

The long-term goal for Cable and Wireless Global is the development of a streamlined, truly global and fully e-enabled business.

E-HR is seen as an important enabler of productivity and efficiency and its early and successful implementation is therefore critical.

HR's ability to deliver HR programs and provide leadership that will contribute to the bottom line through the e-enablement of non-value added functions and leveraging HR's strategic and consultative skills is a key fact in the early achievement of the corporate goal.

Consequently, it is important that the concerns and issues raised during the Stakeholder Dialogue initiative are addressed and acted upon wherever possible.

Keeping data current

- I. The system will be loaded with as much accurate data as possible to initiate its use and the quality of existing data will be reviewed from time to time
- II. Managers and employees will be responsible for updating their own information and thus ensuring that e-HR functions at its optimal level for the benefit of all users. This is an essential requirement. Employees should update any personal changes through Employee Self Service, as soon as changes take place.
- III. Managers will need to make sure their own personal data is up to date and also the organisational data that is relevant for their department.
- IV. All potential users of e-HR will be kept fully informed of the steps to implementation and communication and materials will be made available to support the different phases of implementation and the change from completing tasks manually to online
- V. Detailed work is underway to ensure that all potential users of e-enabled services (both managers and employees) are given sufficient support to be able to use the new services with competence
- VI. User workshops will take place and sessions for user acceptance testing will create the opportunity for feedback to the implementation team of any gaps in the system

Flexibility within the new system

- I. Capturing the effectiveness of global processes is the common goal and local processes and legal variations will be adopted by exception where statutory requirements or compelling business reason so require
- II. It is accepted that not all processes will be e-enabled and that global processes will not capture every HR query and in such circumstances it would be necessary and appropriate to consult with a Business Partner

Increased Workload

- I. It is acknowledged that the transition to the new e-enabled processes will be a challenging time as employees become familiar with the new global processes and using the on-line technology. However, we need to bear in mind the end-goal of being able to operate at a more strategic Business Partner/Specialist level
- II. The aim of e-HR is to create a more efficient HR function with Business Partners focussing on the consultative rather than the administrative capability of their role
- III. E-HR is designed as an enabling tool to automate administrative tasks and the recording of data
- IV. Once the system is operational the time and effort required to keep it working effectively should be much reduced provided that all acknowledge and fulfil their responsibilities.
- V. Responsibility for the technical systems lies with the e-HR Programme Team
- VI. Responsibility for HR Transformation lies with the Business Partners and HR Professionals
- VII. Responsibility for data management lies with the user groups
- VIII. The credibility of HR should be increased if all work together to ensure its success and enable HR to operate at a more strategic level with accurate data

Support and Training

- I. E-HR is the most significant transformation that the company is embarking upon with the potential for far reaching consequences for effectiveness and viability that successful globalisation will help create
- II. The deployment of new global processes is of critical importance and has been fully endorsed by the main board of Cable & Wireless Global and the full HR Leadership Team.
- III. There has been less engagement of the business to date than would have been preferred but this has been necessary in order to make sure that HR "Get the Plot" before communication with the line commences
- IV. It is acknowledged that training and support is an important area for the success of implementation and will take the form of a combination of on-line training blended with communications initiatives

The efforts and input of the Stakeholders to enable early and effective implementation of e-HR are much appreciated and are vital in optimising the successful role of the UK as part of the global business. Whilst in the short-term workloads may increase and deadlines add pressure, the ultimate goal is to create for the individual whether as part of the HR team or as HR customer, more autonomy, greater job satisfaction and a greater opportunity to contribute to the business moving forward.

The aim of Stakeholder Dialogue has been to create a dialogue between the stakeholders and senior members of the e-HR team about the real concerns and issues the Stakeholders may have about e-HR, to gain a deeper understanding of those issues and concerns and to deal with them effectively at an early stage. Thank you to everyone who has taken the time and effort to participate."

Appendix 5

ENQUIRE WITHIN - Constructs Laddered

Registered User: Martin Reddington
User Company: Cable & Wireless

Construct: 1
Similar Pole
HR Manager

Contrast Pole
Line Manager

Laddering Up:
Difference in impact on role and function

It will affect day to day tasks

Different responsibilities in respect of implementation

Laddering Down:
HR Managers have greater
responsibility for roll out and
implementation of e-HR

Line Managers have greater
responsibility for use by
employees

Construct: 2
Similar Pole
Responded Personally

Contrast Pole
Responded via Secretary

Laddering Up:
Reveals level of commitment to process

Because level of commitment determines ultimate effectiveness of
e-HR

Because lack of effectiveness equates to failure of e-HR

Laddering Down:
Junior

Senior

Construct: 3
Similar Pole
Comprehensive

Contrast Pole
Succinct

Laddering Up:
Reveals determination to fully understand issues affecting implementation of e-HR

Because lack of understanding equates to reduced effectiveness of e-HR

Because reduced effectiveness wastes resources

Laddering Down:
Provided detailed information about impact of implementation

Provided less detailed information about impact of implementation

Construct: 4
Similar Pole
Happy to be followed up

Contrast Pole
Did not want follow up

Laddering Up:
High level of openness to communication process

Because it demonstrates a desire to be involved

Because involvement is necessary to fully understand all of the implications of e-HR

Laddering Down:
Showed desire for personal involvement

Showed little or no desire for personal involvement

Construct: 5
Similar Pole
Appeared familiar with e-HR to comment further

Contrast Pole
Not sufficiently familiar with e-HR to comment further

Laddering Up:
Lack of familiarity impedes progress with promoting the concept

Inability to promote the concept means it will not be widely accepted

Lack of acceptance means e-HR will not be used

Laddering Down:
Had good working knowledge of e-HR

Did not possess sufficiently good working knowledge of e-HR

Construct: 6
Similar Pole
expressed positivity

Contrast Pole
expressed negativity

Laddering Up:
Because it defines issues which need to be resolved

Because resolution of issues increases acceptance of e-HR

Because optimum acceptance of e-HR is the ultimate goal

Laddering Down:
Indicates people open to
persuasion about the whole
rationale for the change
programme

Initial disposition to resist
the change programme

Construct: 7
Similar Pole
Male

Contrast Pole
Female

Laddering Up:
Male/female may affect an individual's perception and expectation
of HR

Male/female may have the need for a different style of HR service

If differing needs are not anticipated or recognised then the
service may be less than optimal

Laddering Down:
Less likely to engage in
further detailed discussion

More likely to engage in
further detailed discussion

Construct: 8
Similar Pole
Perceives many disadvantages

Contrast Pole
Perceives no disadvantages

Laddering Up:
Perception of disadvantages may indicate a level of awareness and
thinking about e-HR

Because lack of perception about disadvantages may indicate a lack
of interest, commitment or knowledge about e-HR

Lack of interest or knowledge is important because it inhibits the
fullest and most creative use of the system

Laddering Down:
Display more thoughtful and
programme
critical approach to the change programme

Less willing to challenge the change

Construct: 9

Similar Pole

Outright acceptance of personal responsibility

Contrast Pole

Conditional acceptance

Laddering Up:

Outright acceptance of personal responsibility indicates a person's ability to implement the new system to full advantage

Because acceptance of personal responsibility demonstrates that the individual personally seeks to identify and resolve issues that may impair full effectiveness of the new system

Acceptance of personal responsibility indicates the person's ability to accommodate and benefit from change

Laddering Down:

Will need less ongoing support

Will need more ongoing support

Construct: 10

Similar Pole

Manageable concerns

Contrast Pole

Overwhelming concerns

Laddering Up:

People who feel overwhelmed by their concerns are unlikely to tackle them constructively

People who feel overwhelmed by their concerns and/or are unable to tackle them constructively will not be able to implement change successfully

Successful implementation of change underpins optimal benefit release from the new system

Laddering Down:

Feel more confident that their concerns will be addressed

Not confident that concerns will be addressed

Construct: 11

Similar Pole

Success dictated by personal endeavours

Contrast Pole

Success dictated by business pressures

Laddering Up:

People who support the view that success is dictated by personal endeavours are more likely to own the change process

Unless a person accepts ownership of the change process it is unlikely to achieve optimal success

Laddering Down:

See more reason to engage personally in the change programme

Likely to be more remote in terms of personal engagement in the change programme

Construct: 12

Similar Pole

Not concerned about dehumanisation

Contrast Pole

Concerned about dehumanisation

Laddering Up:

Because the 'human face' of HR is often perceived as an important part of its function

The importance of being able to interface with another human being and for a process not to be entirely mechanical may be an important part of its initial acceptance.

The change from consistently interacting with a human being to not doing so is so fundamental that it is difficult for some people to accept that change readily, at least in the short term.

Laddering Down:

Human face of HR is not a central concern

Human face of HR is important

Construct: 13**Similar Pole**

No expressed concern about lack of proficiency

Contrast Pole

Expressed concern about lack of personal proficiency

Laddering Up:

Lack of confidence in the ability to use the new system will deter people from making the best use of it

Insufficient or inappropriate use of the system will reduce the level of benefit release

Lack of benefit reduces the value of implementing the system at all

Laddering Down:

Considered to be more systems literate

Considered to be less systems literate

Construct: 14**Similar Pole**

Not excited about the possibilities

Contrast Pole

Very excited about the possibilities

Laddering Up:

Optimism about the possibilities of change or even a positive attitude about change will enhance the probability that it will be a success

Positive attitude increases the likelihood of responsibility and ownership of the successful outcome of the change process

The reasons underpinning a positive attitude should be identified, encouraged and distributed as widely as possible

Construct: 15**Similar Pole**

Not confident in ability to implement

Contrast Pole

Confident in ability to implement

Laddering Up:

It shows the need to confirm that e-HR is a change which is important and necessary and not just a 'flavour of the month'

If the change is perceived as a 'flavour of the month' it will reduce the level of commitment to it

A reduced level of commitment is prohibitive to effective implementation of change

Construct: 16

Similar Pole

Expressed concern about time constraint

Contrast Pole

No expressed concern about time constraint

Laddering Up:

Because time pressure creates a feeling of lack of ability to manage the change process and consequent lack of control.

Because lack of ability to manage and lack of control may result in the change process being ignored or sidelined

This would result in lack of commitment and therefore inefficient implementation

Construct: 17

Similar Pole

Perceive clarity about role in implementation

Contrast Pole

Perceive lack of clarity about role in implementation

Laddering Up:

Understanding of individual roles in implementation is critical to develop appropriate levels of commitment and avoid overlap and uncertainty

Clarity ensures speed and certainty

Speed and certainty create an aura of confidence

Construct: 18

Similar Pole

Creating opportunities to engage more strategically with staff

Contrast Pole

Creating opportunities to engage more tactically with staff

Laddering Up:

System enables more efficient engagement with staff at a tactical level and more beneficial engagement at a strategic level

Unless tactical decision making is made more efficient, there will not be sufficient time available to engage in higher level strategic thinking, which is what the business needs to develop and compete

Unless the business can develop and compete it will not survive

Construct: 19

Similar Pole

No expression of apprehension about change

Contrast Pole

Expressed apprehension about change

Laddering Up:

Expression of apprehension about change may translate to a reluctance to embrace change unless it is carefully managed

Because apprehension suggests uncertainty about the benefits that will ensue from the change process

Cannot be commitment to the change process unless the benefits can be clearly demonstrated

Construct: 20

Similar Pole

e-HR process driven by business need

Contrast Pole

e-HR process driven by culture

Laddering Up:

This demonstrates the tension that exists between prevailing culture and the new direction of the business

Because people often feel more comfortable about sustaining the prevailing culture than adapting to the new business direction

Indicates a resistance to change

Construct: 21

Similar Pole

expressed concern about lack of flexibility

Contrast Pole

no expression of concern about lack of flexibility

Laddering Up:

Lack of flexibility was a frequently expressed concern

Because there was a genuine feeling that the system did not sometimes offer the level of flexibility required to provide an optimum service

It is important that the benefits of the system were not totally constrained by its technical operation - i.e. 'boxes on a screen'

Construct: 22

Similar Pole

HR Managers have greater responsibility for roll out and implementation of e-HR

Contrast Pole

Line Managers have greater responsibility for use by employees

Construct: 23
Similar Pole
Junior

Contrast Pole
Senior

Construct: 24
Similar Pole
Provided detailed information
about impact of implementation

Contrast Pole
Provided less detailed
information about impact of
implementation

Construct: 25
Similar Pole
Showed desire for personal
involvement

Contrast Pole
Showed little or no desire for
personal involvement

Construct: 26
Similar Pole
Had good working knowledge of
e-HR

Contrast Pole
Did not possess sufficiently
good working knowledge of e-HR

Construct: 27
Similar Pole
Indicates people open to
persuasion about the whole
rationale for the change
programme

Contrast Pole
Initial disposition to resist
the change programme

Construct: 28
Similar Pole
Less likely to engage in
further detailed discussion

Contrast Pole
More likely to engage in
further detailed discussion

Construct: 29
Similar Pole
Display more thoughtful and
critical approach to the change
programme

Contrast Pole
Less willing to challenge the
change programme

Construct: 30
Similar Pole
Will need less ongoing support

Contrast Pole
Will need more ongoing support

Construct: 31
Similar Pole
Feel more confident that their
concerns will be addressed

Contrast Pole
Not confident that concerns
will be addressed

Construct: 32

Similar Pole

See more reason to engage personally in the change programme

Contrast Pole

Likely to be more remote in terms of personal engagement in the change programme

Construct: 33

Similar Pole

Human face of HR is not a central concern

Contrast Pole

Human face of HR is important

Construct: 34

Similar Pole

Considered to be more systems literate

Contrast Pole

Considered to be less systems literate

Appendix 6

Schlumberger Free Text responses

- Never been introduced to SLB.people other than career centre and SLB3 process so have no idea what it does and does not do**
- Was never given any training regarding the system above. Could most likely give a better picture if I was sure what I was answering about.**
- I would like to have more formal training on the use of HR tools. The only training I have received is on the SLP3/appraisal process, which I found very beneficial**
- SLP3 system requires more support and flexibility to handle contractors, but it is a positive addition. SAP system needs thorough overhaul to be useful, including training and interface**
- I have managed people in Schlumberger since 1995 and do not know what you mean by slb.people. The employee hub has many areas which are restricted but no information to explain who has access to what and when; it is hard to find personnel data so most managers I know bug the personnel centre. SLP3 is good; career manager is good; COR is good; CNP is good but needs editorial input. Who is entitled to see what and when really needs addressing.**
- I have not had too much involvement with slb.people, but I would like to point out that in my opinion, you can never really spend too much time on HR with your team**
- Too much web!!!!**
- The survey appears to include tools of which I have no knowledge**
- The distinction between personnel functions and data is too blurred. If you start at the hub and try to find a travel policy, expenses form, compassionate**

leave policy, defensive driving booking, the distinction between QHSE, personnel and accounts is very blurred. If I wish to answer an employee question about what leave entitlement is when a partner is ill it is impossible to navigate from the hub.

- Although I use slb.people I'm not convinced I take full advantage of it since I've never had any training
- Did not understand final section so did not complete
- Since I have not been trained on slb.people, most of the questions are irrelevant
- I think you should ask specifically for the types of enhancements to slb.people that employees would like to see – both from the perspective of the employee and from that of the manager. Perhaps a follow-up questionnaire after a suitable period of time. Generally a well thought out survey
- The tools are good but let's not have them rule our business lives. Use them as tools and focus on human interaction
- Only Performance Management tools are used within the department. I don't believe the rest of it has filtered down. HR's or Employee Services' records are invariably totally inaccurate so it would seem sensible to get the information from the individual.
- Before I was notified of this survey I was unaware of the existence of manager hub, I have not received any information or training for it. I have used employee hub and found it useful. If an online help exists I don't know where it is located - I tried to access the User Training but it either very slow or wouldn't load.
- Regarding the accountability of employees for their personal information, it should be proportional to the importance of the data required. Regarding the accuracy and quality of the data, it is a struggle to get accurate vacation days taken correctly. It could be a process issue than a system/software issue?! Regarding slb.tools, I was only aware of the Career Centre and SLP3

Performance management tool. It would be a good idea to introduce on Blue QHSE passport the obligation to get a briefing from Personnel on all HR/slb.people tools when one reaches a certain grade and is leading a team.

- I was not aware of Manager Hub until 2 days ago, no training has been given so it was hard to give answers to many questions, should be some questions asking if managers were aware of SLB people applications.**

- A large part of good HR management is to speak to the employee. If we spend a lot of time to enter data in the system which can be interpreted outside of their context, then we start to have demotivated people with impact on the operations. A just middle needs to be found**

Appendix 7

T-Mobile Free Text Responses

No.	Comment
1	In my experience the information services available on HR Direct are great, and straightforward questions can be answered by 24- however by their very nature a number of HR issues still need personal interaction and access to an HR contacts should still be readily available.
2	As an IS employee I would like to see more integration to a single software tool where you don't need to remember multiple passwords.
3	I would personally benefit from some basic training to both make me aware of and introduce me to the e-HR tools available. In general a central and more intuitive "Portal" for all HR activities would be useful.
4	The e-HR functionality is just too difficult to use. It is not intuitive. Finding the right policies, lists of training courses etc, is just not easy, and as often as not, once found the information is out of date. The business partners in HR are very good at their jobs and tend to cover this shortfall but it is can't be an efficient way for the company to run.
5	Overall, the tools are good, and as a technical person I was able to pick it all up very quickly. However, for other's the lack of training has been an issue. The main issue with SAP is that it's slow & cumbersome, not intuitive and difficult to work through without experience/ help.
6	There are online help briefs, but I've never been given time (or made the time) to do this. Also, navigating around Messenger to find the help & support is nearly impossible for a new people manager. More user friendly reports would be good, such as calendar showing each team member's holiday. Currently able to run this report but it is not pretty and only prints to a SAP printer.
7	Link the holiday approval with the actual holidays booked by other members of the team - have to make a decision whether to approve based on an excel spreadsheet kept outside of SAP (relates to above). In HR Direct Managers One Stop Shop, the expenses policy should be listed under Financial Matters as it is in Employees One Stop Shop. If I need to check the expenses policy now I usually look that document up through the Corporate Library.
8	As a Manager I rarely use Employee One Stop Shop, instead using Managers One Stop Shop. I hadn't noticed that the Career Planning section was in the former section until this questionnaire.
9	Processes for recruitment, new employees, changing roles, departments, secondments and leavers all need significant enhancements to safeguard the quality of the data. Peopleclick is not intuitive (in our deployment). Its lack of integration with SAP is frustrating.
10	Still sometimes use HR when I am not to sure, perhaps more training required.

No.	Comment
11	SAP is not the best user friendly tool and is more problematic ending up taking far too long to perform activities. Peopleclick does not often give all the information you require regarding candidates or requisitions, so you end up chasing to find out information when it should be available at the click of a button. There could be improvements both to the level/amount of information available and also performance as neither tool is extremely user friendly.
12	Difficult to answer some questions effectively due to training having been given.
13	My scores on usability are because of the clunky SAP interfaces in MDT and ESS. Peopleclick is great once the vacancy is on and the process of screening and interviewing has begun. Putting on the vacancy in the first place is a pain. Shouldn't we be using compatible role profile templates on Managers One Stop Shop and PeopleClick?
14	Although I work at manager level, I don't have direct reports so have answered questions relevant to this from a generic perspective
15	Be vocal about the truth - one of the guiding principles that seems mostly to be forgotten by HR and the personal understanding of the importance of departments other than HR seems lacking. HR needs to be more involved in the day-to-day activities to understand what is happening in business but with e-HR they only remove themselves further from the problem.
16	I have used 24@T-Mobile and have found it to be very timely and reliable. I find it difficult to find the information I need on HR Direct. I have on occasion found policies to be out-of-date. As a member of the Learning & Development team the concept of 'self-service' is problematic in ensuring that the right people attend courses at the right time.
17	All employees' and managers' self service functionality plus process/policy documentation should be consolidated into a single access point served by a single source of data. I do not use the Flex and pension services that sit externally and I am very frustrated with having to book travel on messenger then re-key data into SAP.
18	<p>Use of Peopleclick when used infrequently by a Hiring Manager is difficult to use. e-HR is no replacement for being able to SPEAK to someone in HR. I agree that having an online e-HR is definitely helpful to the business as most information relating to policy and procedures is available online.</p> <p>I feel the training given on usage of SAP was very limited as we don't tend to use SAP frequently - it would be useful to have an online supporting procedure to demonstrate how to use it for future reference.</p>
19	The need for personnel onsite is essential as they provide the support we need when making decisions on disciplinaries and grievances, and they provide fantastic guidance to both TM's and OM's. If personnel was to be reduced, it would be absolutely necessary to provide cover online or via telephone from HR personnel when conducting disciplinaries etc during contact centre opening hours 7am-10.15pm
20	Some of the tools such as Peopleclick are awkward and not user friendly. 24@T-Mobile can take significant time to answer queries Manager's Desktop does not always seem to accurately reflect absences in SAP R/3
21	SAP tools are not very user friendly - each application has a different interface (not consistent) and the expenses application is a nightmare. Everything else HR Direct, 24@t-mobile, L&D stuff is excellent.

No.	Comment
22	It would be of better assistance to align all the tools and have links from the actual documents or embedded information explaining how they work. e.g. New starters and mandatory courses are not included in some areas and are in others
23	Improved team data reporting would be helpful also the ability to maintain next of kin and emergency contact details in Employee Self Service.
24	It would be good to have more electronic training material regarding SAP in messenger. A common interface to all SAP application would make some roles much more straightforward.
25	SAP functionality is neither intuitive nor standard.

APPENDIX 8

Publications

Academic Articles

Reddington, M. (2004) *Manager Perceptions of e-HR*. BAM, St Andrews University, 30 August to 01 September 2004

Martin, G., Alexander, H., Pate, J. & Reddington, M. (2006) *Using Technology to Transform the Future of HR: An Illustrated Model of the Implementation of e-HR*.

(Paper presented to the Academy of Management Annual Conference, Atlanta, 12 to 16 August 2006)

Reddington, M. & Martin, G. (2006) *Linking e-HR to Strategic HRM: A Framework and Case Study Evidence*

(Presented by Martin Reddington and Graeme Martin at e-HRM Academic Conference, Holland, October 2006)

Reddington, M., Martin, G. and Bondarouk, T. (2008) *Manager Perceptions of e-HR Outcomes: a Framework, Case Illustrations and Some Reflections*.

(Presented by Martin Reddington at e-HRM Academic Conference, France, May 2008)

Books

Reddington, M., Williamson, M., Withers, M. (2003) *Delivering Value from HR Transformation*. Sussex: Roffey Park Institute

Reddington, M., Williamson, M. & Withers, M. (2005) *Transforming HR: Creating Value Through People*. Oxford: Elsevier Butterworth Heinemann

Martin, G., Reddington, M. & Alexander, H. (2008) *Technology, Outsourcing and Transforming HR: Potential, Problems and Guidance for Practitioners*. Oxford: Elsevier Butterworth Heinemann

Authored Practitioner Articles

Reddington, M., Williamson, M., Withers, M. (2004) Delivering Value from HR Transformation. *Human Resources and Employment Review*, Vol 2, 1, March 2004, pp 54-60

Reddington, M., Williamson, M., Withers, M. (2004) Shared vision. *Personnel Today*, 23 March 2004, pp 26

Reddington, M., Williamson, M., Withers, M. (2004) Secure the stakeholder's commitment. *Personnel Today*, 30 March 2004, pp 24

Reddington, M., Williamson, M., Withers, M. (2004) Realising the benefits. *Personnel Today*, 06 April 2004, pp 22

Reddington, M. (2005) The sunshine and dark side of technology, *Developing HR Strategy*, 2, pp 13-17

Appendix 9

-----Original Message-----

From: Martin Reddington [mailto:martin@martinreddington.com]

Sent: 02 April 2004 17:17

To: bam04@st-andrews.ac.uk

Subject: Paper Submission

Dear Sir/Madam,

I take pleasure in submitting a paper for BAM 2004.

I would like to make a few points about the submission that may affect your views on the most appropriate track for entry. Your advice and guidance on this matter would be much appreciated.

Firstly, my doctoral thesis is primarily concerned with the subject of e-HR. As such, I could not see a precise track for this, but hopefully you will consider it on its merits and assign to the nearest track as appropriate.

Secondly, I have entered the paper under the guidance given to 'Posters'. However, I am very much seeking critical feedback on my thesis, as I am now in the later stages of my DBA course at Bournemouth University. I wondered, therefore, if the Doctoral Symposium might be the more appropriate forum. If this is the case, then I would welcome the opportunity to write a slightly more expansive document and re-submit by 15 May.

Finally, I want to emphasise that I am very mindful of the 'inevitable tension between academic rigor and practical relevance'. This is why I am very keen to have the opportunity to discuss my work with both academic and practitioner audiences, as it is this way that the so called 'tension' is addressed.

I look forward to hearing from you in due course.

Yours sincerely,

Martin Reddington

-----Original Message-----

From: Rick Delbridge [mailto:DelbridgeR@Cardiff.ac.uk]

Sent: 02 June 2004 16:24

To: martin@martinreddington.com

Subject: BAM 2004

Dear author

Congratulations!

Your submission has been accepted as a poster paper for the Human Resource Management track at the 2004 BAM Annual Conference at St-Andrews, Scotland. Where appropriate reviewers comments are attached. You are responsible for informing any co-authors.

Please note that you can avail the benefits of the early-bird registration fees up-to 11th June, after which normal registration fees will apply. Please visit: <http://www.st-andrews.ac.uk/~bam04>. Please confirm your intention to attend and make any general enquiries to bam04@st-andrews.ac.uk

You can also book your accommodation on the conference website. The conference team has negotiated special rates for participants at 'New Hall', a three star hotel located on the University campus, less than a five- minute walk from the conference venue. It is in a peaceful location close to the golf courses, the rolling Fife countryside, the University Sports Centre and the beaches.

Our attempt at this year's conference has been to make the best use of time and as a result there is some innovation in the conference programme. The conference will begin with the plenary session on 30th August around 19:30 and the tracks/workshops are scheduled for 31st August and 1st September. The conference will close with the conference dinner at 19.30 on 1st September. Please note that this is a tentative model that the conference team is working on and a more concrete form will appear on the website in late June.

We look forward to an intellectually stimulating conference and to providing you with a hearty Scottish welcome.

Best wishes,

Professor Rick Delbridge

Cardiff Business School

Cardiff CF10 3EU

and Fellow UK Advanced Institute of Management Research

London NW1 6DD

Glossary of Terms

CWG	Cable & Wireless Global
ESS	Employee Self Service
ERP	Enterprise Resource Planning
HR	Human Resources
HRIS	Human Resources Information System
HRIT	Human Resources Information Technology
HRM	Human Resources Management
HTML	Hypertext Markup Language
ICT	Information and Communication Technology
IP	Internet Protocol
IVR	Interactive Voice Response
MDT	Managers Desk Top
MSS	Manager Self Service
RGT	Repertory Grid Technique

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