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e-HR TRANSFORMATION PROJECTS WITHIN THE UK PUBLIC SECTOR: CRITICAL SUCCESS FACTORS

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Master of Business Administration

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Abstract

The paper sets out the findings of a study of e-HR Transformation Projects within the UK Public Sector using the lens of Critical Success Factors. Key problems of training (knowledge transfer) and post-implementation management are critically examined. The vast field of e-HR Transformation theorisation is mapped and the project management approaches are scrutinised. Base on qualitative, interpretive research methods, the results provide a rich empirical data set and show clearly the contested nature of “traditional” Critical Success Factors related to these specific projects. Information is based on the assessment of staff involved in both pre and post implementation situations and their experiences in a project and operational capacity. It is concluded that there are specific Critical Success Factors related to e-HR Transformation Projects which should be highlighted as a focus for attention in the construction of the initial Business Case and prior to the selection of the technical solution. Therefore, implications for the e-HR agenda are advanced and specific recommendations are made for project managers and practitioners.

Declaration

This work is original and has not been submitted previously for any academic purpose. All secondary sources are acknowledged.

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1 Introduction

1.1 Background to the research

The research reported in this paper derives from a survey of both practitioners and consultants experienced in the implementation of e-HR Transformation projects within the UK Public Sector. The overall aim of the research is to work with the construct of Critical Success Factors in exploring the realities of such projects and to examine key processes and approaches from the perspectives of implementers themselves. One of the most significant issues for both the potential implementer and for those already involved in the transition relates to achievement of the Business Case objectives. Having undertaken the role of both implementer and operational manager, the researcher seeks to compare and contrast experiences in relation to the typical approaches to implementation, the impact on the HR service and, most importantly, the adequacies of their own Critical Success Factors based on reflection and Lessons Learned to date.

1.2 Research Question

The specific objectives of the research are, firstly, to understand contemporary literature on the theory of e-HR Transformation projects. Secondly, to evaluate the relevance and contribution of Critical Success Factors in this area. Thirdly, to explore the usage, significance and effectiveness of Critical Success Factors in e-HR Transformation projects within UK Public Sector. Finally, if Critical Success Factors are ascertained to be of importance in practice, to consider whether any may be uniquely related to the activity and might be fostered more systematically than is perhaps currently the case through traditional project management techniques, making recommendations for implementers. This paper focuses on the second and fourth objectives of the research project.
1.3 Justification for the research

HR management practices should be an important part of an organisation’s strategy and human capital may be viewed as its most important asset. As it may also represent one of its largest costs in terms of recruitment, compensation and training, it is understandable that it must control those costs effectively. The contemporary HR function in both public and private sector organisations face various challenges in how and to whom it delivers its services, as well as criticism of its effectiveness both strategically and financially (Ulrich and Brockbank, 2005). As a result, this has led to an internal strategy of HR reorganising itself as a function based on a "tripartite" model of shared services, centres of excellence and strategic business partnership (Reddington et al, 2008). As organisations continue to scrutinise all discretionary spending, investments in new technologies to underpin such services require serious cost justification which, in turn, has impacted on further investment needed to progress to “employee self service” technology (see Fielding, 2004; Lawler et al, 2003). Such implementations require a considerable investment of time and money, with over $1.5bn p.a. being spent in Western Europe alone (Lykkegaard, 2007) and entail fundamental change that has significant implications for the human resources and the HR function of organisations.

While the benefits of e-HR transformation in terms of its return on investment is subject to considerable debate, for the purposes of this paper it can at least be accepted that transformation of services through advanced technology is an inevitable aspect of the modern day organisation, particularly if it is to keep up with, and attract, the modern day employee.

1.4 Methodology

The research philosophy undertaken within this paper takes a functionalist stance, with the researcher connected to the network user group under study and as a reflective practitioner (Schön, 1983). As a result, the ontology of the research is recognised to be one of objectivism (Burrell and Morgan, 1982). This research will have deductive elements in terms of the literature review, with a hypothetico-deductive approach as the research moves into the questionnaire stage, thus becoming more inductive. The researcher is aware that, despite the nature of the
subject under research, the project management experience of the individuals within
the subject group will be at differing levels and, therefore, a pragmatic approach will
be used in interpretation of the data.

The literature review will identify gaps in current research, shaping elements of the
questionnaire and the findings will present both qualitative and quantitative data.
The research will be divided into two group studies; for the primary group
(consisting of business functional practitioners), questionnaires will be structured
with both quantitative and qualitative questions whereas those in the secondary
group (consultants) will be purely qualitative. The researcher will seek to avoid
leading questions with a view to allowing the subjects to provide comments based
on their own experiences and thus allow the potential emergence of issues not
discovered during the literature review. The data retrieved will be analysed using
coding to enable the core themes to be linked which, in turn, will be further analysed
leading to emergent theories. Finally, the results from the two groups will be
compared against the outcome of the literature review, providing a triangulated
assessment.

1.5 Outline of the chapters

This paper now proceeds to consider the perceived status and success of e-HR and
the further related challenges for the HR organisation in terms of emerging trends.
The principle of traditional technology project management and the impact of the
involvement of the HR professional will be discussed.

There follows a discussion of the governing methodology and actual research
methods used in the research. The paper then proceeds to critically examine a key
theoretical approach in the study of Critical Success Factors. Selected elements of
the theoretical approach are subsequently applied to structure the presentation of the
findings and certain empirical and theoretical conclusions are then established
before the paper closes with a brief account of the implications arising from the
findings of this research.
1.6 Definitions

In essence, the term e-HR reflects the movement to deliver HR services to its customers via web-based technology. Ruel et al (2004) advocate that the HR function plays its part in driving organisation success and to do so requires it to change its focus, its role and its delivery systems (see also Lepak and Snell, 1998; Wright and Dyer, 2000). They note that the fundamental difference between HRIS (Human Resources Information Systems) and e-HR is that the former is directed to HR itself and, thus, internal improvements, whereas the latter targets the employee group outside of HR. The difference is summarised as "the switch from the automation of HR services towards technological support of information on HR Services" via intranet and internet portals.

Critical Success Factors (CSF’s) as a concept was introduced by Daniel (1961) and is based on the principle that in any organisation certain factors will be critical to its success and that failure to address the objectives associated with those factors will lead to failure of the organisation itself.

Enterprise Resource Planning (ERP) is generally a way to integrate the data and processes of an organisation into one single system and it will usually have many components including hardware and software, in order to achieve integration. Most ERP systems use a unified database to store data for various functions found throughout the organisation and it is not uncommon for e-HR projects to be part of a larger scale ERP initiative where the organisation undertakes a radical review of its other corporate systems. Therefore, much research reflects the assessment of both e-HR and CSF’s in terms of ERP. Similarly, Business Process Re-engineering (BPR), which is the analysis and redesign of workflow within and between areas, is prevalent within the subject matter research.
Lessons Learned is a term often used in project management whereby an evaluation of project activity and relative success is undertaken, generally at the end of a key stage or at the closure of the project in order to identify potential recommendations for future projects and therefore continuous improvement.

1.7 Summary

This chapter has set the scene for a path towards an eventual conclusion of a theoretical framework for the future in chapter five. The next chapter will draw upon and evaluate literature on e-HR Transformation and proceeds to critically examine key theoretical approaches to the application of Critical Success Factors.

2 Literature Review

2.1 Introduction

This literature review encapsulates the strategies and challenges currently faced by many UK Public Sector organisations in relation to HRM technology. An attempt will be made to contextualise the research question within the body of knowledge available at the time of writing.

During the exploration of recent literature and available knowledge-base on the above subject area, from the perspective of a functionalist practitioner, a gap in the research was identified, that of specific information regarding the criticality of skills required for the ongoing support of HR technology post-implementation and its impact on the transformation programme. This gap in knowledge forms the main driver of this study and it will be explored below in a more in-depth analysis of the literature.

2.2 e-HR Transformation Projects & the Influence of Critical Success Factors

This objective of this review is to provide a description and analysis of theory (Jankowicz, 2005), focussing on the following aims:
➢ To understand contemporary literature on e-HR Transformation.
➢ To understand contemporary literature on Critical Success Factors in transformation projects
➢ To investigate the current approach to e-HR transformation projects in UK Public Sector
➢ To draw conclusions and make recommendations for implementers in applying appropriate Critical Success Factors to e-HR transformation projects within Local Government Authorities.

It is important at the start of any literature review to map out the relevant areas of literature appropriate to the field of study (Fisher, 2007). To this end, primary and secondary literature topics were identified for research:

**Primary Literature**

➢ e-HR in private and public sector
➢ Critical Success Factors – concept
➢ Critical Success Factors for e-HR

**Secondary Literature**

➢ HRM Strategy
➢ Project Management
➢ Business Process Re-engineering
➢ Leadership and Change Management

The literature search started with attempts to answer the research aims by finding the knowledge-base which broadly related to the researcher’s own organisation’s technology strategy for HR and, in particular, Lessons Learned during those projects. This included looking at the drivers for such change, an evaluation of success and emerging trends.
2.3 Contemporary Theory on e-HR Transformation

2.3.1 Drivers and Assumed Benefits

In 2004, Gershon's review of Public Sector efficiency prompted a driver "to reduce bureaucracy to free up resources by the simplification and cross-organisation sharing and consolidation" and organisations inevitably sought to review those services such as HR. In addition, HR managers within the UK Public Sector have been perceived as "the poor relation" and less sophisticated than their Private Sector counterparts (Harris, 2002) thus representing an "enclave" in the profession (Lupton & Shaw, 2001).

Ruel et al (2004) advise that e-HR is not a "specific stage in HRM, but a choice for an approach to HRM" which can and may continue to be delivered by more traditional means but, nonetheless, should offer an efficient mechanism to implement HRM policies, strategies and practices. As process re-engineering and technological solutions are interdependent (Keebler, 2001) a logical consequence is the "virtualisation" of HR (Reilly & Tamkin, 2006; Snell, et al, 2001). Liman (2009) reflects that government organisations are associated with high costs, inefficiencies, low performance and disconnectedness from citizens needs, resulting in the perception that organisations that control such group service costs as HRM are more successful, and goes on to suggest that e-HR is not only about efficiencies in processes but also underpinning HRM strategies which may attract and retain the best people. As a result, the Public Sector is now realising that it needs to identify the key competencies of their staff "and the skills needed to accomplish certain missions" and is starting to catch up with the private sector in appreciating the benefits of BPR.

With regard to the perceived benefits, the common themes of efficiencies through time savings and enhanced strategic information are regularly cited, together with the flexibility for employees to access real-time data on a “24/7” basis (Overman, 2002) and a more cost effective delivery method (Stanley and Pope, 2002: Weatherly, 2005), allowing HR to undertake more strategic activities and for the business to recognise HR's role in creating competitive advantage (Pfeffer, 1995: Lengnick-Hall and Moritz, 2003).
Reddington et al (2008) first warn of the "bandwagon" effect whereby HR tend to become similar in structure through mimicry of assumed “best practices” (Lavie, 2006) and draw upon the findings of the 2002 Chartered Institute of Personnel and Development report which highlighted that only 34% of HR line managers indicated an appreciation of the benefits of HR. However, they maintain that the strategic drivers address HR's transactional and transformational goals, with the former focussing on reducing service costs and the latter on "freeing up time for HR staff to address more strategic issues", as well as the benefit of organisations having greater access to a wide array of data. Hunter and Saunders (2004) discuss the challenges for HR in achieving the benefits forecast; in pursuing savings by technological transformation, HR often relies on shifting the burden of administration onto the organisation itself and, if it is to do so successfully, it must look to "real process management expertise to integrate the technology investment it has made in the shared services operating model". However, they point out the importance of having a data capture and reporting tool in order to support the organisation in strategic workforce planning and development, echoed by Lawler and Bordreau (2006). In considering the influence of data and information, Falletta (2009) warns that it has "little value to an organisation unless it is transformed into meaningful intelligence".

2.3.2 Implementation & Evaluation

In contrast to the theoretical benefits advocated, research into the implementation and evaluation of e-HR in practice provides a different outlook. A study by Monks and McMackin (2001), which sought to assess the correlation between HR Systems and an organisation's performance, concluded that it remains "an unresolved puzzle". Findings associated with research into the tangible benefits of e-HRM can be contradictory (Strohmeier, 2007); where some see cost savings and efficiencies, others identified more organisation barriers and disappointments with the technology. As early as the 1990's, most organisations utilised a computerised HR information system and were pursuing what were perceived to be more effective state-of-the-art models. Despite such systems being "attractively packaged and slickly presented", many failed to deliver owing to "implementation delays, difficulties with gathering data, technical hitches and inadequate reporting
facilities”, leading to disillusionment (Robinson, 1997). The last decade has seen an increase in the generation of surveys within the HR profession (IPD, IES, Towers Perrin), although given the source of many of the early leading software suppliers, much still stems from the US. Compared to expectations, early surveys reported of the limited usage of "sophisticated" HRIS in practice (IES/IPD, 1999), with reasons attributed to culture, organisation size and strategy (Broderick and Boudreau, 1992). More recently, in their exploration of the relationship between e-HRM and HRM effectiveness, Bondarouk et al (2009) highlight that many UK Public Sector organisations fail to take full advantage of the transformational potential of e-HRM, particularly where power relationships between stakeholders shape attitudes to technology, and Foster (2009) offers a consultant’s perspective, describing a common "inertia". Based on the empirical research undertaken by Ruel et al (2004), the findings include confirmation that although HR typically reduces headcount costs as a result of e-HR implementation projects, adversely organisation reaction can often be negative. For example, information on both the HRM policy and use of the technology itself in undertaking the related processes is pushed toward intranet guidance, resulting in a conception of devolvement of responsibility from HR to the employee in a "self-service" capacity. Similarly, not all employees have access to a computer or the appropriate skills to utilise the technology, further adding to disengagement.

Also in contrast to the advocates, Sullivan (2005) argues that, outside of administration, HR technology has had limited impact on strategic decisions and merely replaces "already weak HR functions with technology". Similarly, Ulrich and Brockbank (2005), warn that e-HR can often be "merely a way to deliver HR administration services" and does not necessarily result in HR becoming more strategic. This is reiterated by Guetal and Stone (2005) in their argument that e-HR does not on its own result in HR becoming strategic business partners, is "no panacea" and must thoroughly prepare if it is to be truly transformational (Human Resource Management International Digest, 2006:14). Similar results to those of IES/IPD surveys (1999) were identified in that HRIS was being used to administrative ends rather than analytical and strategic purposes and therefore still effectively being used as "automated filing cabinets" (Robinson, 1997: also Vosburgh, 2007). As a result, Morley et al (2006), suggest "an increasing proliferation of HR approaches at enterprise level with no apparent convergence to
any single model of HR types", with HR being in a constant "state of flux" and relatively low status as professionals, which Hope-Hayley et al (1997) refer to as their resulting “chameleon-like” appearance.

In their survey among UK HR professionals, Hussain et al (2007) discovered that less than 50% of respondents used e-HRM in support of HR strategic tasks. However, their conclusion that it is "likely to be used more for strategic decision making in the future" does not offer an insight into why it is not utilised immediately for that purpose given that this is likely to have been a driver for its implementation at the outset. In an investigation of the impact of ERP on operational efficiencies of medium sized firms, Khosrow-Pour (2007) found that for majority they did not materialise and, although admitting that the findings were inconclusive as to the reasons, professed that one key issue would be the cost of the technology itself, such as those associated in providing access to all employees, customisation of the product and additional hardware (Lengnick-Hall and Moritz, 2003). Lack of system usage post-implementation is also highlighted (Overman, 2002).

Thus, there has been a gradual recognition of both the positive and negative consequences of e-HR from the perspective of both HR staff and their customers, particularly where the change management and implementation aspects are ineffectively handled. For example, headcount reduction is often sought and achieved as part of the business case agenda but can have "damaging consequences for organisational memories and knowledge retention" (Reddington et al, 2005: see also Martin et al, 2006: Ruel et al, 2004). In analysing how HR chooses and uses information systems, Fielding (2004) draws upon the IRS Employment Review findings and reflects that the most common objectives in acquiring an HR management system are to improve the quality and flexibility of information, with some of the most significant factors in choosing a system being cost, the future flexibility of the technology and ease of use. Overall, satisfaction levels are described as a "mixed bag" and despite cost cutting being high on the agenda many struggled to bring in their system within their allocated budget. Skills issues continued to present problems for organisations wanting to integrate with other systems and training was identified by many respondents as an area that "others looking to implement HRMS neglect at their peril". Reporting on a survey of HR
professionals, Gainey and Klass (2008) suggest that the modern HR manager must be "technologically savvy… with the ability to successfully incorporate and manage computer-orientated applications throughout their organisations and report on the benefits and concerns”.

Research by Borroughs et al (2008) shows that large scale ERP implementations typically deploy less than 25% of the available functionality, suggesting "a fundamental disconnect between the perceptions of what will add value to the business and reality of the service that needs to be delivered" (see also Corsello and Tichman, 2008). They determine that the reason for that disconnect stems from the software industry who have engaged in a "functional arms race" to build functionality that will give them a competitive advantage and so now have products which look good in sales demonstrations but are rarely implemented effectively”. However, they conclude that the bulk of blame is with organisation itself which loses sight of its goal and fails to link it to effective technology design.

An organisation must ensure that it is fully aware of all potential costs associated with not only with the purchase of the software but those associated with ongoing maintenance and development throughout its lifecycle (Targowski and Deshpande (2001). Reddington et al (2005), suggest an inextricable and "symbiotic" link between the development and implementation of HR processes and technology. In general, ERP software solutions are based on the principle of best practice processes and a "one-size fits all" attitude which is often termed the "vanilla" system. Modification over and above the "vanilla" system results in additional implementation and maintenance costs both in the project and post implementation context. Where "vanilla" processes are not achieved and compromises are made, benefits can start to "leak" from the transformation and the risk of this increases as implementation draws nearer. This is echoed in an IDSHR Study (2002), which recommends that as many HR systems are now modular in design, allowing the flexibility to add to them over time, organisations must carefully consider which functionality they actually require. In view of the scope, a phased implementation is often adopted and therefore it is important that an organisation clearly defines its requirements during the design phase to avoid costly customisations which may also
result in delays in implementation and difficulties in maintaining the system in operation. In contrast, Becker and Gerhart (1996) had warned that a piecemeal introduction of HR practices can lead to “deadly combinations” which neutralise rather than reinforce one another. The study also highlights the importance of the system being configurable by the users themselves. In a subsequent study in 2003, "a realistic appraisal of the existing state of HR information and assignment of responsibility for data cleansing" is recommended as a fundamental initial step. The construction of any information system involves "decisions about what data will be collected and how” if it is to provide managers with an aid to decision-making (Liff (1997). This extends to the assertion that for managers to consider HR Information Systems plausible "they would need to provide data that addressed problems they were facing... and to do more than confirm what they already knew", concluding therefore that an approach based on participative design is required. Carden (2009) stresses the importance of placing strategy first and technology second, advocating the need to plan upfront how data will be leveraged across the organisation before selecting the tool and planning the implementation which should be "ready to use right away" and easy to use. However, the suggestion that having a system "70% right" with ongoing improvements may have mixed reviews from investors as, although this corresponds with other findings that a phased implementation can be beneficial, ongoing improvements may equate to hidden costs and a lack of upfront awareness of either system capabilities or weaknesses. Therefore, again, there is no blueprint for the inexperienced implementer.

An IRS Employment Review (2004) of HR managers in the assessment of HR technology projects indicates the following as actions that would be taken with the benefit of hindsight:

- Specified more clearly levels of service with providers 72%
- Integrated more fully with organisation-wide IT 64%
- Organised more training for users before implementation 59%
- Integrated more fully the separate hr systems 54%
- Organised more effective project management training 51%
- Negotiated more over price 50%
Hagood and Friedman (2002) suggest that organisations do also seek to evaluate the relative success of HRIS implementation projects, for example, in the usage of the Balanced Scorecard (Kaplan and Norton, 1992) to measure HRIS performance and they identify a specific set of criteria i.e.:

- Delivering each new program segment on time and within budget
- Delivering each functionality as promised
- Maintaining high system performance standards
- Reducing reliance on legacy systems
- Increasing customer satisfaction with products and services from the HR Information System
- Enjoying our work (i.e., employee satisfaction)

However, although such criteria may appear on the surface to link to the “success” of HR, again, they do not assist the implementer in providing a toolkit to ensure success or highlight potential pitfalls and are therefore more akin to objectives.

### 2.3.3 Emerging trends

Although software providers themselves have been impacted by the global technology market recession during 2009, reports indicate that the demand for HR solutions noticeably recovered (Waters, 2009) which may suggest that organisations recognise the need to drive efficiencies further via HRM strategy. Despite the investment involved and associated risks, it would appear also that the e-HR strategy is still an attractive proposition with Watson Wyatt’s 2009 HR Technology Trends Survey reporting that 61% of employers are taking steps to optimise their current service delivery models.

With regard to the sourcing of the appropriate e-HR tool, the most common way companies obtain their e-HR systems is from their ERP vendor. Two other approaches were popular: (1) buying pieces from an Application Service Provider (ASP) and (2) developing their own e-HR systems (Lawler and Mohrman, 2003). In the early days of supplying an "on demand" hosted service, vendors acted in the capacity of an ASP but soon discovered their own costs to be too high and unprofitable. In answer to this, vendors are now allowing third parties to use their
software in the “Software as a Service Model” (SaaS), providing a multi-tenancy arrangement with the theory being that the model can offer a single set of common code. In this regard, Weatherly (2005) highlights the potential of how HR might further build on its success (although this assumes success has been achieved). For the suppliers at the outset, huge upfront licence cost outlay and annual support revenue made it very profitable. However, as most organisations opted for in-house system maintenance as opposed to a hosted service, perceiving this to limit ICT costs and security risks, there has been a shift toward a "pay as you go" model to avoid such upfront heavy licence costs. The emerging trend of the ASP sees third party organisations supplying software or software related services over the internet and facilitating the outsourcing of services such as HR. As a consequence, he suggests a further emerging trend will be seen in academic and business programmes in universities and colleges adding HR Technology related courses in view of the expertise that the HR professional will require in HR technology. Indeed, early expectations regarding the benefits of HRM technology assumed the emergence of specialist HR roles such as "internal consultant", “change agent" and "information centre" (Torrington and Hall, 1989).

Macey (2009) also comments on the temptation for companies who wish to minimise the costs associated with ERP to look into SaaS, with some Public Sector organisations diversifying into JV partnerships and looking to build upon their own investments by offering the service to others. Sullivan (2008) warns that this can still leave gaps and high costs. It is unlikely that a "vanilla system" would be useful to all parties, leading to expensive customisation and the repeated dilemma:

"while SaaS goes a long way toward eliminating the whole list of IT footprint considerations, it doesn't address all of the surrounding manual effort needed to deliver HRM."

The concept of e-HR itself is also reported to be subject to constant change with various emerging trends in the Public Sector, for example: "E-gov 2.0" will see the increase in usage of such tools as blogs, Facebook etc. for recruitment and training purposes; "M-government" e.g.: texting to applicants, and "O-Government e.g.: shared-service payroll for multiple organisations. With regard to the future of HR Systems, Spirgi (2009) looks at such trends and highlights the issues in its shear
breadth of scope, reporting that, as a result of business stakeholders now demanding a return on their investment at "an accelerated pace", many providers are adopting a SaaS delivery model. Spirgi provides no assessment of the benefits or risks to any of the parties involved at this stage, although it may be assumed that one of the main drivers for the software provider itself would be in the reduction of implementation partnership programmes and therefore traditional costs entailed.

With regard to considering trends in the HR profile itself, it is useful at this stage to reflect on the issue of skills. Based on empirically grounded research in considering factors of usage, Kossek (1994) had argued that HRIS use produces its own culture. For example, “computer jock phobia” referred to the tendency for mainstream HR practitioners to isolate and compartmentalise those with the functional system knowledge and, as a result, justify their lack of need to develop their own HRIS knowledge and skills. Dominick and Luftman (2005) propose that in working in partnership in BPR, ICT and HR professions "need to develop a complementary set of skills", as HR professionals must be credible in their knowledge of the technology they themselves are advocating for use. Although they may come from a non-technical background, leaders may now find themselves with the responsibility for selecting, using, recommending and managing technology, and must assess "their personal technology competence" (Leadership for the Front Lines, 1997)

In more recent research and in contrast to the regularly advocated benefits of e-HR systems in reducing headcount, Panayotopoulou et al (2007) report that respondents still view HRM as being an "integral part of strategy in the future", with HR departments expanding and employing more professionals. It is not clear from their findings however as to whether this view reflected a high percentage of single-person departments present within the sample or "of a natural concern that existing HR departments should acquire more employees with IT skills". The latter may be the case as around 40% also indicated a need for organisations to invest in e-HR training and all agreed that HR departments face difficulties in recruiting and retaining skilled staff with the ability to manage and develop the system to its full potential. Indeed, HR professionals' own IT skills and management commitment in this regard were identified as critical success factors in e-HR adoption and use, with such requirements often overlooked at the outset. Similarly, another success factor for e-HR is identified as the employees' IT skill which, along with communication
of the system benefits, were identified as a key component for active participation and buy-in. Allen (2008) also reports on the concerns of employees regarding the lack of assessment and commitment to training within ERP involving web-based system implementations.

In considering the future of the technology in 2015, Sullivan (2008) suggests that "it will need to provide a decision making tool, not just transactional improvements", predicting that HRMS and HRIS may become "HR-PDI: Human Resource People Decision Improvement", providing an improvement to quality, speed and business impact of all people related decisions". With regard to this theory and definition, the notion of HRIS needing to be instrumental in strategic thinking is not new and so appears to act more as a seed in providing a title for others to build upon. Sullivan also imagines that, in future, systems will "learn" and be predictive, identifying patterns with information being "pushed to managers" as HR technology will "anticipate" issues, with social networking "bleeding" into HR. Although such advances may be possible, his conclusion that such a leap in change will not require "quantum advances in software or hardware" does not take into consideration HR implementers having the budget or the appetite for such further change which may require "quantum" energy and may be viewed as rather optimistic given research to date.

However, on reflecting on the past and present, Sullivan effectively summarises that there is little value from software "that limits the creativity of their strategic business processes, takes forever to implement or calcifies once implemented". Problems such the sheer expense of an HRMS are pinpointed; for example, licensing costs are identified as requiring considerable capital outlay, as too are the execution of major upgrades every few years in order to take advantage of new capabilities, plus additional consultancy costs. In a similar vein, Macey (2009) comments on the changing face of HRMS and the downside of implementation such as costly integration and support costs, particularly when locked in with one vendor, again warning that vanilla systems can be inflexible in design and have not taken away "the pain of two years implementation". Significantly, Macey advises that in the future system implementation "will no longer be a technical function and will come from the business" as "knowledge of the component and software capability and the
HR function that it supports is a big advantage”, although this perhaps wrongly assumes that HR has insufficient opportunity for input to date.

2.4 The Concept of Critical Success Factors

As indicated at the outset, the concept of Critical Success Factors is based on the principle that in any organisation certain factors will be critical to its success and that failure to address the objectives associated with those factors will lead to failure of the organisation itself. This was expanded by Rockart (1982) in relation to the ICT environment and, although recognised as a difficult task owing to its subjectivity (Clarke, 2001), defining CSF’s and the definition of failure within technology projects has been the subject of much research in the past two decades.

As opposed to earlier research which might be considered to focus more on “what” needs to be achieved (Liu & Walker, 1998; Baccarini, 1999; Pinto and Mantel, 1990) as opposed to “how”, one of the first significant pieces of empirical research was that of Diallo and Thuillier (2004) who considered what may constitute project success as perceived by key stakeholders, outlining a comprehensive set of evaluation criteria that includes the satisfaction of the beneficiaries with the goods and services to specifications, achievement of the project objectives and completion of the project in time and within budget. Competency, motivation and an enabling environment are also key aspects identified (also Fortune and White, 2006; Ashbaugh and Rowan, 2002). However, from the e-HR implementer’s perspective, unless experienced, this may still be insufficient in adequately outlining potential pitfalls peculiar to such technology projects.

The perception of “failure” is also subjective (Clarke, 2001). Indeed, “system” failure is likely to be a situational and pluralistic phenomenon unless the “acceptance criteria” is compiled and agreed by all involved. Clarke draws upon Lyytinen and Hirschheim (1987), concurring that systems failure is grounded in social theory and that systems fail because those involved in and affected by the system are not adequately considered, as opposed to purely technical shortcomings, concluding that certain types of failure are more prevalent in certain types of organisation. For example, diverse organisations seem inclined to “process failure”, mainly where technical experts have a strong involvement in the specification and
design of the system, commonly concentrating on a standard offering expected to be used across the diversified structure. In this case, problems most often occur during implementation, preventing the process being effectively completed.

2.4.1 The Significance of Project Management

Throughout the assessment of Critical Success Factors in research, much reference is made to the significance of the effectiveness of the project management and the competencies of the project team (Pinto and Slevin, 1987; Cleland and King, 1983; Khang and Moe, 2008). With regard to the project management techniques typically employed by the UK Public Sector for information system projects in particular, Prince2 (Projects in Controlled Environments) is considered to be a "de facto standard" (Office of Government Commerce, 2005). Prince2 defines a project as "a management environment that is created for the purpose of delivering one or more business products according to a specified Business Case". Fundamental to this is the recognition that the project has a definite start and end date, a project manager, and a clear and common goal with an approach understood by all parties. In addition, Prince2 suggests that "a project, by its nature, is a temporary structure", disbanded on completion of the objective. It offers a process-based approach to project management and counters criticism for being overly detailed and unwieldy by recommending that it is not prescriptive and should be utilised in context of the scale of the project.

Therefore, from the perspective of a Public Sector Project Manager charged with the responsibility of an e-HR transformation project, how might Prince2 provide adequate techniques for ensuring success? Ironically perhaps, given its roots, Critical Success Factors for technology projects are not specifically covered and possibly the closest offering is a mixture of elements under the umbrella of "controls", for example, Risk Management. However, without prior experience of a similar project and the benefit of Lessons Learned, again, such controls are unlikely to unearth the specific pitfalls.

Kondo (2009) indicates "six critical attributes of successful project managers" being: organisation, leadership, pragmatism, communication, empathy and anticipation, and warns particularly that projects can fail when "technology is not
fully developed or fully understood by those using it". The distinction between project and programme management is explored by Boar (2001), who reiterates that for any project it is important to know its parameters and lessons learned. Although throughout the various literature, e-HR transformation is generally referred to in terms of a project, in view of the scale of its scope; it is undoubtedly a programme of activity and therefore a series of projects undertaken in parallel or sequentially over a period of time. However, much evaluation of e-HR management appears to be based on the expectation of a traditionally defined project with a beginning, middle and end as opposed to an ongoing, long-term programme of activity which may in reality be a series of projects with a "stop-start" characteristic. Consequently, traditional project management theory does not adequately cover the likelihood of HR technology projects being undertaken by an inconsistent project team over what could be a number of years.

2.4.2 CSF’s for e-HR Transformation

Firstly, in order to explore whether CSF’s particular to e-HR Transformation currently exist or perhaps should exist, it is important to consider those associated with ERP in general. Gupta (2000) finds that the keys to successful implementation are related to the following:

- securing top management commitment
- forming cross-functional task forces to link project management with business units carrying out an assessment exercise of hardware requirements
- making deployment in a step-by-step introduction rather than all at once
- starting early planning on user training and support
- streamlining decision-making to move implementation quickly
- being patient, as ERP implementation takes time.

Davenport (2000) assesses the CSF’s involved in the implementation of ERP systems; in commenting upon the shortcomings of the typical ERP, long implementation periods with "a three- to five-year project duration" are indicated as being common in large organisations. Davenport highlights the problem faced by such organisations in the "very time-consuming" work involved. In response to this criticism, he advises that vendors have created "preconfigured" system processes
that, in theory, provide generic system routines that may allow them to "ram in an ES in a matter of months". However, the regularity of system updates both for the purpose of keeping the software itself in line with the latest specification and to meet changes in the business processes themselves means that the software is often considered inflexible. In addition, the resource level and cost subsequently involved in the maintenance of the system once in operation is an issue.

In assessing an organisation's readiness for BPR, Abdolvand et al (2008) highlight the negative impact of “resistance to change” and summarise that perception of an effective HR will depend upon the organisation's perception of the quality of HR services, irrespective of how they are delivered, thus the main theme of cost persists. Much research has been undertaken in relation to “attitudes” toward system technology; for example, Lippert and Swiercz (2005) explore the relationship between HRIS and "the trust an individual places in the inanimate technology (technology trust)" and its effect on HRIS implementation success. Martin and Beaumont (2001) focus on the significance of communication in change, stressing the importance of having a realistic objective, champions, and stakeholder analysis. Their assessment, however, assumes that the business case and associated return on investment forecast continues to remain positive and does not explore the impact of a change in that situation. HR is seen to be a "communication facilitator" (see O’Dell and Grayson, 1998), but that size of the organisation "coupled with dysfunctional political agendas" may prohibit development. They suggest that modern ERP should provide a software application that is "both rigid and flexible" i.e.: rigid in its standardisation of processes and an avoidance of customisation but flexible in its ability to be "configured" by the customer for ongoing modification in line with inevitable changes in business strategy.

Khosrow -Pour (2006) highlights the issue of the client/contractor relationship, the differences in project success criteria given emphasis by each group within a project environment and the significance of knowledge and learning in "agenda-formation" within IS development projects (see also Tansley and Newell, 2007). Similarly, Martinsons and Chong (1999) report that a "single configuration is unlikely to please everyone" and advocate "early and sustained user participation". Several common problems are also indicated including resistance to change and, significantly, employees’ reluctance to learn new techniques or accept new
responsibilities that link back to the issues highlighted earlier by Kossek (1994) regarding the tendency to “ghettoize” those few who have acquired the essential skills. Drawing upon Gupta (2000), Al-Mashari (2003) emphasises that Enterprise Systems are more than just an IT project and require demanding change management regimes with people management being a clear subset, again focussing on the area of people development: "the implementation of ES requires a whole new set of skills and expertise and organizations must pay extra attention to where these skills will come from”.

In exploring the concepts of critical thinking in the management of technology, English (2008) highlights the importance of ensuring the technical skills of internal staff are up to date and useful in meeting the organisation's needs, recognising that training to be both expensive and time-consuming. English also identifies that although technology may allow access to large amounts of data, there is no guarantee of its accuracy or its availability at the appropriate time. Another "battleground" is identified in a drive for departmental control of information technology once deployed "where knowledge begins to proliferate… users want to exert greater control”.

The significance of skills continues with Reich (2007) suggesting that there are key areas within IT projects where knowledge-based risks occur including "failure to learn from past projects, the competence of the project team (and) problems in integrating and transferring knowledge". Al-Mashari (2003) also argues that "the most effective ES possible will not improve a company if its employees do not know how to use it", with the cost of training and preparation in this area being significantly underestimated. The research also reports on the importance of obtaining and training analysts who require knowledge of both business and technology. In addition, even where achieved, retaining those professionals becomes a problem as their market value increases as a result and, therefore, the success of a project can depend on the capabilities of those consultants with an in-depth knowledge of the software.

The skills associated with the design, selection and implementation of HRIS are further considered by Flynn (2008) who reflects on the emerging trend and necessity of "HRIS Professionals". Flynn's assessment distinguishes this role from the "HR
Professional" in that associated knowledge must encompass "information systems, human resource activities and project management". This is not a new consideration; Fischer (1995), for example, highlights the difficulties symptomatic in HRIS project schedules where a phased structure is often applied. In this event, the "stop and go" nature of the activities leads to problems in securing both internal and external resource for a protracted timescale. The diversity of resource involved, from functional HR professionals to technical implementers and consultants "each having a language others can't comprehend" makes successful teamwork a challenge. As the project progresses, a growing awareness of the functionality and possibilities mean that HRIS projects "have a way of expanding in progress" and becoming sidetracked.

In assessing the skill sets required for e-HR, Guetal et al (2009) advise that traditional skill sets and competencies relating to knowledge of legislation and policy design are no longer sufficient and must be supplemented by a knowledge of technology. In addition, staff must be skilled in business transformation, change and project management, commenting that some of which are difficult skills to teach but must essentially lead to new HR professional roles to accommodate the shift to technology-based delivery methods. Ultimately, they reflect on empirical evidence and report that insufficient coverage is given to HR technology for business students specialising in HRIT, with little opportunity to access systems and provide hands on training on the subject, resulting in mostly theory-based approach. As a result, business schools will need to reposition their programmes to focus on HR technology in business settings. Unlike Sullivan earlier, whose assessment of the future roles within HR had little grounding, based on the various post-implementation evaluation surveys, there would appear to be more substance to their predictions for these new roles.

2.5 Conceptual Model

On reflection of the literature review above, the work of Ashbaugh and Rowan (2002) identifies key elements which encapsulate many of the themes and conclusions regarding the failings identified in the various research and therefore, as such, provide the basis for an effective summary in relation to what might lead to those CSF’s typically associated with public sector e-HR Transformation. Although
the article is not based on specific empirical evidence, it draws upon the researchers' views and experiences gained in a practical functional and consultancy capacity. Unlike other assessments, the article does not merely restate the Critical Success Factors but recognises that there can often be a failure to meet those factors and provides an HR practitioner with some quite specific and recognisable issues for consideration.

Significantly, this researcher acknowledges the similarities in their mutual circumstances and therefore that the model resonates from experiences; it is also acknowledged that the model is not based on UK Public Sector. It is because of these points that this paper will seek to explore empirical evidence to assess the validity of this model (Appendix A).

2.6 Summary

The initial aims of this literature review were to gather information about HR technology projects and determine the general view from academics on the CSF’s associated with their implementation. The literature has highlighted that, despite high investment and support costs, the drivers for such projects continue to underpin HRM strategy with mixed reviews on the associated benefits. There is relatively scant data in relation to the typical timeline associated with the transformation of all HR services in relation to the UK Public Sector, possibly as this is dependent upon the scope of the processes and the approach taken. Furthermore, although much commentary exists in relation to CSF’s for technology projects in general, from the viewpoint of a novice implementer embarking on an HR technology project (in the role project manager, HR manager or both) the significance of system support skills both during and post implementation may not be adequately expressed within existing CSF frameworks.

Although post-implementation evaluation is increasing, it would appear that certain lessons have been slow in learning, particularly in relation to the issue of providing adequate training for both the HR professional user and the organisation (Ashbaugh and Rowan, 2002: Al-Mashari, 2003: Flynn, 2008), resulting in the relatively recent emergence of quite prescriptive outlines of roles for the new HR function in the wake of e-HR (Guetaal et al, 2009: Sullivan, 2008). Whereas certain researchers at the outset reflected on the disappointing negative aspects of e-HR (Robinson, 1997),
contemporary research now benefits from the vast array of studies undertaken since (Reddington et al, 2008) and are able to take a positive yet realistic view of the venture.

Two key aspects have emerged from the literature review that will lead, in part, to further assessment within this research:

1) Despite many references to the significance of data in driving the business case for e-HR, there is little information regarding the availability or quality of that data and the potential impact that may have on both the implementation timeline and the perception of the system’s effectiveness (Hendrickson, 2004)

2) No detailed exploration has been identified into the potential connection between weaknesses in training and the success and pace of the project

Further analysis using the data from a focussed survey and through the conceptual model may identify potential links between these issues and the profile and approach of organisation itself. However, although the review took an unexpected direction in terms of the significance of emerging trends in both the technology itself and in service provision, in view of the potential scope of this aspect, it will not be included in the research. Before the findings of this research are presented, the following chapter provides a detailed discussion of the methodology, methods and research procedures adopted.
3 Methodology

3.1 Introduction

In this chapter a detailed description will be presented of the methodology chosen to explore and answer the research question. A brief discussion of research philosophy and principles will be presented in order to contextualise the choice of methodology as being most appropriate for this piece of research. The justification for choice of methodology will be made explicit and will be clearly linked to the literature review (Chapter 2). Limitations of the chosen methodology and rejected methodological stances of will be examined and a description of the methods adopted will be given to facilitate any future research in this area. Finally, there will be a discussion of the ethical issues faced by the researcher and the steps taken to mitigate the risks or address the issues.

3.2 Research Philosophy

A methodological pluralism has been adopted for this research, taking elements of realist and interpretivist approaches. According to Fisher (2007), the realist researcher tends to believe that the knowledge we acquire can give good indications of what should be done; this mode would involve structuring a problem by breaking it into its constituent parts, the relationship between the parts then studied and looking for recurrent patterns and associations. Thus realism research is searching towards an understanding of the common reality in which many people operate inter-dependently (Gummesson, 2004, p.105). Ultimately, patterns may be used to establish principles or laws that could be used to select among a series of possible solutions to a problem.

Realist researchers form and test hypothesis about patterns of association between selected data with such hypothesis treated as possible explanations rather than fixed laws and therefore the hypothetico-deductive approach is at the heart of realist research (Popper, 2002a: 2002b). Following the identification of the research topic, the typical approach of such research is to identify key concepts or variables from literature or from the researcher’s own experience and begin to speculate at the outset how they relate to each other and whether changes in one variable cause
changes in another. This leads to the development of a testable hypothesis and the collection of data which may be analysed to establish whether the hypothesis may be supported or refuted. The risk associated in using this approach is that it can take a complex issue and reduce it or simplify it to a number. However, surveys or questionnaires in realist research can take into account people’s "perceptions" and a number of statistical techniques may be used to decide whether any variations in respondents’ answers were significant or merely random (Fisher, 2007).

Triangulation has been used as a synonym for mixed methods (Sobh and Perry, 2006; Denzin, 1978; Bazeley, 2004). In realism research, triangulation provides a “family of answers” (Pawson and Tilley, 1997) to capture a single, external, and complex reality. Sobh and Perry (2006), advocate that although different perceptions may be identified, they "should not be considered to be confusing glimpses of the same reality, rather they should be considered to foster understanding of the reasons for the complexities of that reality", hence numbers alone should not be used in realism data analysis and the data analysis should concentrate on “reasons why”. However, because realism research is about underlying structures and mechanisms and therefore its data almost always qualitative data about meanings, this researcher will seek to undertake methods to reduce the risk of having too broad a range of data which could result in difficulties in reducing it to manageable levels.

With regard to the interpretivist approach, a researcher is often participant in the process they are studying, sometimes approaching the research in an open manner with a view to letting theories emerge from research material, along Grounded Theory approach. This methodological term was introduced by Glaser and Strauss (1967) and arose within sociology as a reaction to the previous ‘grand theory’ approach (Mills, 1959) cited by Goulding (1999), where the task of research was to provide validation, or disconfirmation, of theoretical formulations (Robson, 2002). The method also seeks people’s accounts of how to make sense of the world and the structures and approaches within it imply that theory is implicit in the material and can be drawn out by an iterative process of coding and comparison, therefore allowing less potential control and direction than the hypothetico-deductive method.
As there are merits and weakness in both purely realist and purely interpretivist approaches, Fisher considers the question of whether the two may be combined. Gill and Johnson (1997: pp 135-136) suggest that although in taking the realist stance aspects of interpretivist approach could be brought in as a useful addition the research, the reverse is not true as it would undermine the interpretivist epistemology that our knowledge of the world is socially constructed (Saunders et al, 2009: p112). In contrast, limitations in the realist research in identifying associations between variables and consequences can be enhanced by the interpretivist approach by allowing the study of people’s accounts of the processes and can be used to create a “quasi-causal” account of how the variables interact: “realist research shows there is a connection: interpretivism gives a possible description of how the connection may work” (Fisher, 2007: p57).

Indeed, Glaser and Strauss over the years went on to adopt different stances on the nature and process of Grounded Theory. By 1990, Strauss and Corbin (2008) began to formulate stages and procedures that they advocated should be followed by anyone undertaking grounded research and allow the research problem to be specified at the start of the project, taken from literature or from personal experience. Glaser, by comparison, consistently held the view that both the emergent theory and the research topic itself must evolve from the research material. Glaser’s approach is described by Fisher (2007: p.123) as being “a looser style of interpretation that allowed the material to speak for itself”.

Whereas the traditional research paradigm relies on numerical (i.e. quantitative) data and mathematical or statistical treatment of that data whereby the ‘truth’ that is uncovered is grounded in mathematical logic, interpretive research operates in a paradigm with different assumptions about knowledge and being. Kaplan and Maxwell (1994) contend that the goal of understanding a phenomenon from the point of view of the participants and its particular social and institutional context is compromised when textual data is quantified. As a result, this research proceeds with an acknowledgement that reality is socially constructed and events have multiple truths and meanings depending on the individual’s own experiences and epistemology. However, it also proceeds with the assumption that common trends can be identified:
“it is likely that quantitative methods and qualitative methods will eventually answer questions that do not easily come together to provide a single, well-integrated picture of the situation” (Patton, 1990: pp. 464-5).

3.3 Research Strategy

3.3.1 Justification for the selected paradigm and methodology

It is useful at this point to refocus on the aims of the research. The evolution of modern day HRM delivery models is now effectively bound to technological developments which, despite being costly, in the case of the public sector are largely driven by the need for efficiencies and, in turn, subject to public scrutiny. The research seeks to identify the Critical Success Factors associated with e-HR Transformation in this arena. Evidence suggests that, to fully understand the way e-HRM is used, it is important to take into consideration local idiosyncrasies (Strohmeier et al, 2009). An assessment of its usage within UK Local Government Authorities may also provide insight into whether there may be any commonality in such idiosyncrasies based on organisation type.

Responding to the challenges of definition, system type and diversity of viewpoint and experience (including that of the researcher) justifies the adoption of a part-realist, part-interpretivist methodological stance within the largely qualitative and partly quantitative research paradigm. In view of the researcher’s own experiences and role in project management, key concepts and variables evident at the outset of the research provide insight and opportunity to break down the problem into its constituent parts, allowing for speculation as to the cause and effect and thus a hypothetico-deductive approach. As Fisher (2007) advises, surveys require the researcher to distinguish, in advance of the study, the phenomena that are to be studied from the context that influence or affect that phenomenon. Surveys therefore are not an efficient means of studying the complexity of things in particular, thus adopting a supplementary interpretivist stance in the design of the survey questions will enable an assessment of the experiences and viewpoints of practitioners from their own subjective perspectives and a hypothesis which, even if refuted, the findings of which may still be considered worthwhile.
3.3.2 Rejected Methods

As outlined earlier, the emergence of theory associated with the interpretivist approach is often linked to Grounded Theory. According to Leonard and McAdam (2000), the concept of emergence is a central tenet of Grounded Theory as nothing is forced or preconceived and in which everything emerges including the participants’ main concern, the sample, the questions asked, the concepts, the core category, and so on. “We do not know what we are looking for when we start . . . we simply cannot say prior to the collection and analysis of data what our study will look like” Glaser, (2001: p.176). Whereas realism researchers enter the field with prior theories, in contrast, Grounded Theory researchers gradually construct a theory from interacting with their own accumulating data, without any inputs from other people's theories in the literature (Sobh and Perry, 2006). Therefore, Grounded Theory in its purist sense was rejected as it would not allow for the effective theoretical testing of what may be quite specifically identified CSF’s. In order to prepare a questionnaire to underpin any emerging hypothesis, the scope would need to relate to certain topics otherwise, to allow for emergence of theory; it would run the risk of being too large and too vague, thus rendering it ineffectual.

Action research was also rejected as, according to Eden and Huxham (1996, pp.75-86), “the findings of action research result from involvement with members of an organisation over a matter which is of genuine concern to them”. This means that the researcher would have to be part of the organisation within the research is taking place (Coghlan and Brannick, 2005). As the researcher’s own organisation model is a joint venture partnership, it is atypical of Local Government Authorities and has been excluded as it would not, therefore, be a suitable comparison and may skew the findings. Furthermore, the nature of this research study would not make action research practical as the study involves several organisations. Other research strategies were considered including, structured interviews, case studies, ethnography and archival research (Saunders et al, 2009) but all were rejected as they did not appear to allow the researcher the tools or the time to answer the research question and meet the aims given the geographical spread of the group.
3.4 Research Design

As indicated earlier, an initial problem in researching e-HR Transformation is that of definition and terminology. Organisations may be influenced by various parties in how they define their objectives (for example, HR, ICT, vendors, consultants, implementation partners, Change Agents etc.) and, as a result, identification of groups which may be classified as undertaking a particular path, by particular means requires clear specification by the researcher at the outset in order that those groups approached readily identify with the subject matter and their role in the research. Additional methodological challenges facing the researcher include the diversity of the system solution offering itself. A vast array of HR related software packages exist and with a varying degree of functionality on offer, from the basic to the sophisticated.

Therefore, in order to assess organisational progress and success on a like-for-like basis, ideally a certain commonality in objectives should be sought at the outset. For example, not all UK Public Sector organisations have selected the same software, nor might the scale of their change agenda be of a similar level. Although unusual, it is not impossible for an organisation to elect to address their transformation agenda with the implementation of bespoke system processes. Furthermore, given the array of definitions and theories in relation to Critical Success Factors, it is accepted that the subject matter itself is highly subjective and therefore open to different interpretations and conclusions by the research respondents depending on their own roles and experiences. This research is based on a combination of inductive and deductive techniques; the former will be used to understand the perception and significance of CSF’s in e-HR Transformation programmes within UK Public Sector based on their own experiences and the latter to assess the relevance of CSF’s in e-HR Transformation programmes identified in recent literature.

Using Saunders et al’s (2009) description, this research is an ‘explanatory study’, involving a literature search and survey resulting in largely qualitative data. It will also be appropriate to collect some quantitative data that will be used to contextualise the findings and identify any correlation in trends.
Data consists primarily from the use of a questionnaire of two sample populations. The research design has been used to enable the construction of contextualised accounts of their experiences in the transformation of HR systems. The questionnaire, which is described below, targets participants involved in such activities during 2009/2010. Both groups are related to the field selected and have therefore been identified as the most appropriate to answer this research question. By researching both practitioners and consultants, this will provide an opportunity to further explore and contrast theory (the consultants) versus practice (the practitioners). Patton (1990) considers that there are no set rules for selection of a sample size in qualitative research and that each scenario needs to be considered in context.

**Target Group A: Practitioners**
There are currently 39 users of a particular global software supplier who are members of a single UK Public Sector User Group (of which the researcher is affiliated), including 26 Local Government Authorities. The selection from this sub-group of LGA’s allows for more meaningful analysis as the relative contrasts and comparisons are based on commonalities in organisation profile, political and organisational agenda, business drivers, project approach, assumed benefits and, above all, system selection.

**Target Group B: Consultants**
The five consultants selected for this research were identified for their specific experience in working with the UK Public Sector in e-HR Transformation Projects and, importantly but not exclusively, their experience in projects utilising the same software as the practitioners.

The research has attempted then to compare and contrast the similarities and differences within each of the groups to determine commonalities or gaps in CSF’s for e-HR transformation. The reason for this research setting was based on the researcher’s experience in this field, her reflections on that experience and access available. In addition, the findings of this research may go toward assisting the group itself in evaluating plans.
3.4.1 Design of Instrument

With regard to the detailed design of the questions, in view of the hyperthetico-deductive aspects of the research methodology, some were pre-coded having been developed from theoretical themes within the literatures (Saunders et al, 2009). However, a number were also “open” in nature, allowing the respondent to provide further information on their own experiences in order to avoid constrained accounts (Fink, 2003a). It was recognised that unlike in-depth and semi-structured interviews, the questions required precise definition prior to data collection as the process relies on one opportunity to collect the data. Also, open questions would require additional coding mechanisms as additional categories of data may emerge. In this regard and again in view of the hyperthetico-deductive approach having effectively identified a focus for the research subject, selective coding allows focus on the principal categories and the development of an explanatory theory (Strauss and Corbin, 2008).

As validity and reliability of the research question is essential, Foddy (1994:p17) stresses that “the question must be understood by the respondent in the way intended by the researcher and the answer given by the respondent must be understood by the researcher in the way intended by the respondent”. Common approaches to assessing their reliability include that of “test re-test” (Mitchell, 1996); as this method requires the questionnaire to be administered twice, this researcher discounted this approach given the timescales and potential for failure in response, instead opting for a pilot scheme.

During the design phase, an online survey software tool (Surveymonkey.com) was tested by the researcher amongst her peers in order to assess its value and practicalities. However, owing to potential risks in losing track of some data returns as experienced during this test phase and the limited benefits anticipated in adequately measuring responses to open, uncoded questions, the researcher considered that more control could be had by creating and managing the distribution and evaluation of the questionnaire personally. The final questionnaire was designed using MS Word with the layout presented with the ability to complete the questions within the form and save a copy electronically for return via email to the researcher, thus avoiding the complications of paper format.
3.5 Research Procedures

As the design of a questionnaire differs according to how it is administered (Saunders et al, 2009), in view of the geographical considerations of the target population, self-administered questionnaires were issued directly to the participants via their email address.

Prior to full design, each member of the target groups was contacted via their email address as identified within the User Group Membership directory. This allowed for the following checks:

- That all email addresses were valid
- That all targeted participants were still acting within the roles identified
- That all targeted participants were willing, in principle, to engage in research at a future date.

This initial activity also allowed the researcher to identify any potential issues regarding the planned research strategy. Following their feedback, concerns raised regarding the potential scale of the questionnaire were taken into consideration in refining the design. A pilot of the draft questionnaire was employed including one representative from each group in order to assess suitability and subsequently allowed for modification of certain questions which had not provided clear responses.

It is important to note at this stage that although the subject matter and objectives remained the same, the exact wording of the questions differed slightly between groups owing to the nature of their differing roles and standpoints. The Practitioner Group was piloted first as it was anticipated that the findings of that pilot might allow for a more informed design of the questions for the Consultant group pilot.

As an initial complementary task, the researcher conducted an upfront analysis of the User Group membership profile, covering information such as size of the
organisation, the functionality deployed etc., providing some valuable quantitative data in relation to the participants and, moreover, alleviated the burden of their providing it, thus allowing for a more focused questionnaire.

Following the pilot, the final version questionnaires were issued and the research was carried out between February and March 2010. Respondents returned the completed questionnaires via email and these were saved electronically by the researcher, each being allocated an identity reference code. The researcher created a template using MS Excel listing all generic questions. On receipt of each questionnaire, the answers were updated (mostly by Copy/Paste function) onto the master sheet. As many questions were of a pre-coded nature, this allowed for filtering of such responses but also an overview of free text responses side by side to enable systematic content analysis and the identification of emergent themes, distinctions and commonalities. Firstly, a deductive approach was undertaken whereby theoretical concepts were used to extend the initial inductive analysis. Secondly, an inductive approach was adopted to allow for the development of themes which might emerge from the data and to avoid imposing categories from the literature onto the data. Finally, triangulation of the data collected served to support the validity of the data and of the questionnaire itself which, other than in the pilot, has not been used previously.

3.6 Ethical considerations

This research adopts a deontological standpoint in that the ends served by the research can never justify the use of research that is unethical for example, obtaining information by deceit (Saunders et al, 2009). Similarly, no pressure was applied to gain access to the participants who declined (Robson, 2002).

An introductory email was sent to the target audience inviting them to participate and providing them with an overview of the research objectives. All participants were offered access to the findings and ethical considerations were applied in ensuring confidentiality. Furthermore, the researcher avoided any implication of findings being intrinsically linked to their particular software supplier as to avoid
any potential assumption of inference as to the quality of the software or the support of the supplier.

3.7 Summary

Certain limitations in this methodology have to be acknowledged in that not all of the participants were at the same stage within their transformation projects. Whereas Glaser (1998) recommends approximately a year for the completion of a grounded theory dissertation, this research was time constrained to eight months from conception to completion, thus not allowing for any follow up with the participants at a later stage to assess whether their views might have changed. The conceptual framework to develop a theory of Critical Success Factors for e-HR Transformation outlined in Chapter 2 and the methodology discussed in Chapter 3 prepares for the data analysis in the following chapter. Much of the focus will be looking at the detailed transcript from the “open” responses and using a “thick” or “thorough” abstraction or description associated with qualitative data. The qualitative data will be based on meanings expressed through words and analysis through the use of conceptualisation Dey (1993) and Robson (2002). The quantitative data will be drawn from the pre-survey assessment of the user group information plus the results of the coded survey questions. In the following section, the author will begin to explore the emergent theory informed by the rich data derived from the processes described in this chapter.

4 Findings

4.1 Introduction

This chapter provides a description of the findings from the research based on a survey undertaken during February and March 2010, including an analysis of the data output and a comparison to the main themes that emerged from the literature review in Chapter 2. Selections from the interview notes together with some quotes from interviewees are used to provide insights into the context and essence of the responses.
4.2 Application of Methodology

The survey results comprise of 12 Public Sector Functional Manager respondents from a total of 39 who were ultimately invited to participate in the study, representing a 31% return. In addition, five Consultants experienced in e-HR implementation projects in both the public and private sector arena were invited and participated, with a 100% return.

With regard to the Practitioners, respondents came from diverse set of backgrounds, generally linked to either HR or ICT service areas. Respondents worked in Public Sector organisations ranging from small-scale specialist organisations to Borough Councils, with the number of HR system records spanning 350 to 18,000. Respondents ranged in experience from those self-classifying as relatively inexperienced (in not yet having completed the e-HR transformation process), to those who had completed the initial objectives and therefore relatively experienced. Differences in experience were often significantly related to differences in opinions on CSF’s and these differences are analysed in Chapter 5.

The researcher was a practitioner researcher being associated with the respondents by membership of the same software User Group and, in the case of the Consultants, having worked with them on individual projects. Therefore, it has been noted that practitioner research presents particular research challenges and the researcher accepts the social constructivist implications of her role which to some extent may have influenced respondents’ accounts. However, it was made clear to respondents that the open questionnaires which formed the main research instrument for this phase of the research were anonymous. Furthermore, in constructing the findings of this research, the researcher has been circumspect on her role and the influence this may have had on the respondents’ answers.

For this research project, a pragmatic approach was adopted towards designing the research methods and the adoption of in-depth methods for data generation which align with the interpretivist stance. The principal research method comprised a questionnaire distributed among volunteer Practitioners and Consultants. Questionnaires were designed specifically for each group and posed questions regarding their experiences in e-HR projects and their views on associated Critical
Success Factors. While the questions were developed from theoretical themes within the literatures, they were actually worded so as to open rather than constrain accounts. Respondents were thus asked, for example, to provide their own views upon potentially “emerging CSF’s” or those which may be considered “particular to Public Sector” based on their own experience. In briefing the questionnaire, respondents were encouraged not to allow the format of the questionnaire to constrain their responses.

4.3 Findings from the Research Questions

It is both timely and appropriate at this stage to remind the reader of the research aim and objectives prior to presenting the findings related to the question. The aim of this work has been to enquire into the Critical Success Factors associated with e-HR Transformation Projects within the Public Sector from the perspectives of the Practitioner and the Consultant. Clear objectives were established as a means of informing the methodological approach to the study:

- to understand contemporary literature on the theory of e-HR Transformation projects.
- to evaluate the relevance and contribution of Critical Success Factors in this area.
- to explore the usage, significance and effectiveness of Critical Success Factors in e-HR Transformation projects within UK Public Sector
- to consider whether any may be uniquely related to the activity and might be fostered more systematically than is perhaps currently the case through traditional project management techniques, making recommendations for implementers.

This paper focuses on the second and fourth objectives of the research project.

Following the literature review, the questionnaire was formulated to include the Conceptual Model identified in Chapter 2 (See Appendices: A, E and F) and also with a view to exploring the significance of potential emerging trends by the adoption of hyperthetico-inductive processes. This section will present the rich data gleaned from the surveys and will draw conclusions from the above objectives in
relation to the aim of the study. In view of confidentiality, all targeted participants were allocated a unique identification number.

**PRACTITIONER GROUP FINDINGS**

All data and percentages are based on the output from the questionnaires of 12 Practitioners. Where responses to a particular item were not given, figures have been rounded to the closest whole percentage point. Throughout the summary, a selection of the Practitioners’ commentaries will be provided as examples to support specific points.

**Drivers for Change**

The literature review identified typical drivers for change within HR, which are reflected in points 1, 4 and 5 of Table 1 (below). These items link to HR’s drivers for efficiencies, often in line with its ambitions to move from a bureaucratic machine to a strategic business partner. Less prevalent during the literature review were any references to what might be considered potential drivers in relation to the actual development of the workforce itself and, in this regard, the researcher included points 2 & 3 to establish whether there may be any emergent theory. By establishing the Practitioners’ drivers for change at the outset, this allows the researcher and the reader to set into context the perspective of the Respondent in relation to the purpose and relative success of the project itself. Respondents were asked which, if any, they recognised in their own business case (nb: the list was based on the business case elements from the Researcher’s own Private Sector project experience):
Table 1: Drivers for Change

<table>
<thead>
<tr>
<th>Q: ID</th>
<th>Description</th>
<th>YES</th>
<th>NO</th>
<th>DON'T KNOW</th>
<th>NO RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A need to improve the quality of HR services to the business and, at the same time, reduce overall HR delivery costs</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Provide a system which supports the identification, selection, deployment, development and retention of people to support the needs of the business.</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Provide a foundation for promoting personal development, growth, career satisfaction and appropriate reward for employees</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Enable the elimination of fragmented, redundant and labour-intensive processes traditionally identified with traditional HR functions</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Provide the ability to report on and analyse HR and payroll related information (e.g. operational and management reports) from a single source</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

The analysis reveals that the most prevalent drivers for change relate to cost and process efficiencies. Significantly, potential benefits in relation to the employee and workforce development in general (2 & 3) are a less common consideration. From their supporting comments, additional drivers are integration with other corporate systems and an ERP approach.

**Business Case Benefits**

Continuing with the theme of drivers for change, Respondents were asked whether their own organisation’s business case assumed any direct impact on HR, for example, a reduction in headcount and/or utilisation of the resources in a more strategic capacity and, if so, whether it was achieved or is on target to be achieved.
Findings: 91% of all respondents confirmed that the business case benefits had assumed some savings based on headcount reduction, although information regarding its criticality or relative success was limited.

Critical Success Factors

As CSF’s should be identified at the outset of a project, the Researcher set out to establish the relative awareness of the Concept of CSF’s in relation to the project, posing the following question (Table 2):

Table 2: Practitioner Survey Question 6

(Q: Were any of the following identified and documented as Critical Success Factors at the outset of the project?)

<table>
<thead>
<tr>
<th>Example CSF</th>
<th>Yes and Achieved</th>
<th>Yes But Not Achieved</th>
<th>Not Identified</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Resource</td>
<td>42%</td>
<td>33%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Sufficient funding</td>
<td>50%</td>
<td>17%</td>
<td>8%</td>
<td>25%</td>
</tr>
<tr>
<td>Robust Project Management and Governance</td>
<td>67%</td>
<td>8%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>Effective Change Management</td>
<td>50%</td>
<td>25%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>Senior Management commitment and sponsorship</td>
<td>42%</td>
<td>33%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>Appropriate available data</td>
<td>25%</td>
<td>33%</td>
<td>8%</td>
<td>25%</td>
</tr>
<tr>
<td>Appropriate training/adequate skills transfer</td>
<td>33%</td>
<td>33%</td>
<td>8%</td>
<td>25%</td>
</tr>
</tbody>
</table>

In terms of what may be considered the most commonly identified and achieved CSF, “Project Management and Governance” was the highest rated element. With regard to CSF’s which were “Not Identified” at the outset of the project, “Dedicated Resource” was the most reported missing element. For those CSF’s which were confirmed to have been “Identified but Not Achieved” within the
project, “Dedicated Resource” and “Appropriate Available Data” were also among the higher rating categories.

In order to further test the theory of CSF’s and each element of the Ashbaugh and Rowan conceptual model (Appendix A), Practitioners were asked to reflect on the status of their projects in relation to the original timeline and consider the degree to which each individual element might have impacted on its progress. In order to ensure each were considered adequately and provide more useful information regarding the degree of their significance, the Researcher avoided “Yes/No” responses by allowing the them to rate each on High- to- Low scale, assuming that certain elements may be influential to differing degrees. The figures in Table 3 represent the profile of Respondents’ ratings per CSF category. NB: Where Respondents left a section blank, these have been classified as “Not Applicable”.

Table 3: Critical Success Factors: Practitioners.
(Q: If behind schedule or plans have been abandoned, to what degree were any of the following contributory factors?)

<table>
<thead>
<tr>
<th>Category Group ID</th>
<th>(Developed from Conceptual Model)</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Not Applicable/Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Change in business strategy/priorities</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>10.2</td>
<td>Lack of appropriate people participating full time</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>10.3</td>
<td>Lack of project funding (e.g.: budget not provided as per original Business Case)</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>10.4</td>
<td>Escalation in cost from original Business Case</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>10.5</td>
<td>Lack of project team skills or knowledge of the system</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>10.6</td>
<td>Poor Project Management and governance</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Category Group ID</td>
<td>(Developed from Conceptual Model)</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>Not Applicable/Blank</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------</td>
<td>--------</td>
<td>-----</td>
<td>----------------------</td>
</tr>
<tr>
<td>10.7</td>
<td>Lack of business engagement</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>10.8</td>
<td>Lack of operational support team skills (for implemented functionality)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>10.9</td>
<td>Unrealistic expectations</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>10.10</td>
<td>Poor process design</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>10.11</td>
<td>Lack of strategic context of growth and expansion</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>10.12</td>
<td>Lack of appropriate data/content</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>10.13</td>
<td>Lack of shared vision</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>10.14</td>
<td>Lack of support from Implementation Partner/consultants</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

**Findings:** without classification responses for each of the items, complete evaluation is compromised. That said, it may be assumed that those items which were classed as “Not Applicable/Blank” resonate less with the Respondent than those whereby a classification, at whatever rating, has been provided. Significantly, item 10.5 “Lack of Project Team Skills or Knowledge of the System” elicited the most responses, followed closely by 10.2 “Lack of Appropriate People Participating Full Time”. Similarly, item 10.3 “Lack of Project Funding” provided a range of High/Medium/Low responses which could indicate a potential link to this aspect with regard to a lack of funding for either resources in general or investment in the training of those resources.

**Project Management**
The literature review in Chapter 2 identifies the importance of Project Management techniques in underpinning the concept of CSF’s. Respondents were therefore
asked questions which would enable an assessment of its usage within those projects.

**Findings:** 59% of Respondents confirmed that Prince 2 methodology had been deployed, although to varying degrees:

“In Prince2 was deployed in a light touch style that allowed the project to develop at the pace required without compromising overall deadlines and negating the advantages of a prototype type environment which was critical to the success of the venture.”

“In Prince2 was used at a high level, but due to the timescales we had, delivery took precedence, so some disciplines were neglected.”

Of the remaining group, 25% did not respond or were “unsure”, 8% utilised alternative internal organisational methods and 8% advised that no specific Project Management techniques were utilised at all. With regard to the latter groups, a cross-reference of those Respondents’ answers to other questions did not indicate any extreme impact on the project or less success in comparison with the full group and the findings were mixed. For example, although there had been some delays to the project, elements of Self-Service had been achieved.

In addition, 42% of Respondents had undertaken some form of post-implementation assessment (100% of which had deployed a Project Management methodology). Where a Lessons Learned report had not been produced, the main reasons given related to the project being viewed to be still in progress. Of those who had undertaken the exercise, all reported of the benefits in doing so:

“A lessons learnt report was produced. The key points that I recall were around relationships with implementation partner and how they should have been better and we should have been more direct in our dealing with them and also around the slow kickoff to the project where time was wasted going over old ground rather than concentrating on what the new processes were going to be and how we would fit around them.”.
Change Management

The importance of effective Change Management was prevalent throughout the literature review and Practitioners were asked to reflect on their own practices and its relative success.

Findings: this topic elicited a high response rate of 83% with a diverse range of answers and interpretations. In general, responses covered three main, and mostly distinct, topics i.e.: training, system access and stakeholder management. There was no evidence of any particular Change Management methodology or tool having been deployed; 50% of the Respondents confirmed that a Stakeholder Analysis had been undertaken at the outset of the project, 33% reporting that it had not been undertaken. In terms of its relative success, where projects had progressed sufficiently to determine this, in general, it was reported to have been of benefit and “fairly accurate”; only 33% had conducted a formal survey based on functionality implemented to date, mostly reporting largely positive feedback. Of the remaining majority 67%, 16% also reported positivity from the business. Lack of formal approaches again stemmed from the status of the project. In assessing the HR Function itself, 58% of Respondents described its adapting to the new processes as “slow” or having varying rates of success; 33% reported a positive outcome.

With regard to Stakeholder Management in particular, the following examples of Respondents’ supporting commentaries highlight a high awareness of Change Management and its importance in terms of both CSF’s and in Lessons Learned:

“There was no formal workstream on change management, but we did ensure that key stakeholders were met regularly and a board was established with these people. Extensive training was written with functional experts who were also included in the design. We also have corporate communication channels which had regular updates”.
**Functionality**

Following the findings of literature review, the Research survey was designed to include questions which might serve to identify any potential significance with regard to the quality, availability and maintenance of the relevant data on the success of the project and/or the new system (e.g.: organisation structure, employee data). Furthermore, the Researcher set out to establish whether this, in turn, might impact on strategic decisions regarding the utilisation of the system functionality to its full potential.

**Findings:** 29% reported an actual or expected positive improvement on data quality and availability, a further 25% advising that it was “too early” to determine; 33% reported negative issues in relation to poor data quality.

“Yes, I would say very efficiently, data quality and consistency in the application remains very high. MI has improved by having a single source of HR/Payroll data and also, by having people able to view all relevant MI via their self-service access. We also have a variety of self-service reporting available to 100+ users who are line managers.”

“Data quality has been an issue from the start. It has been approx 18 months since implementation and we are just getting supporting policies in place to improve the quality of the data. This includes improved processes.”

With regard to their plans to fully utilise all purchased components of the software, although 50% reported that this was still the organisation’s objective, 33% declared this to be “unlikely”.

**Resource**

A key issue to emerge from the literature review was the risk associated with underestimation of the criticality of adequate and skilled resource both during the project and post-implementation. In order to ascertain whether there was any correlation between the emphasis on those related CSF’s and the reality of operational model, Practitioners were asked to provide information regarding the levels and types of resources supported the system and whether those levels were
higher, lower or the same as anticipated. The classifications provided for
assessment were a) System Administrator; b) Database Analyst; c) Technical
Specialist; d) Functional Specialist; e) Systems Operational Managers.

**Findings:** in view of the differing organisations and the status of the relevant
projects, not all categories of staff would be currently identified and the resulting
response classifications may be grouped as follows:

- Higher Than Expected
- As Expected
- Unknown/Too Early to Ascertain
- No Response

Where a response was provided, **Table 4** provides an outline summary of response
classifications received. The figures reflect the response of the Practitioners per
resource type expressed as percentages.

**Table 4:**

System Support Resource Levels (Compared to Business Case Forecast)

<table>
<thead>
<tr>
<th>Response Type = Expected Level</th>
<th>System Administrator</th>
<th>Database Administrator</th>
<th>Technical Specialist</th>
<th>Functional Specialist</th>
<th>Operational System Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Expected</td>
<td>42%</td>
<td>42%</td>
<td>8%</td>
<td>25%</td>
<td>33%</td>
</tr>
<tr>
<td>Unknown/Too Early to Ascertain</td>
<td>25%</td>
<td>17%</td>
<td>42%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Higher Than Expected</td>
<td>25%</td>
<td>8%</td>
<td>17%</td>
<td>8%</td>
<td>0%</td>
</tr>
</tbody>
</table>

In relation to post implementation support levels in particular, only 16% reported
this to have been adequately forecast and 34% confirmed that this had not been
assessed at all. The remaining 50% were unclear either because the information was
not available to them or they were still in a relatively early stage of the programme:

“We didn’t plan for any internal support costs, but have incurred them. If
we’d planned better, then we’d have a central internal support team to cover
end-user support, minor project delivery, on-going business improvement
etc”
CONSULTANT GROUP FINDINGS

All data and percentages are based on the output from the questionnaires of 5 Consultants which represents 100% response rate. Although the survey questions posed to the Consultants were based on the same broad themes as those included in the Practitioner Survey, the Researcher adjusted the questions to take into account their differing circumstances and perspectives, for example:

- the relatively transient nature of the role of a Consultant within a project environment
- their experience of multiple projects and the benefit of hindsight
- their specialist knowledge
- their having little or no accountability in ultimately delivering the business benefits in the years post implementation.

Critical Success Factors

Based on the same list of CSF’s provided to the Practitioners, the Consultants were asked (accepting that by their definition as critical all may be of equal importance) whether they would consider one to be the most underestimated.

Findings: Table 5 provides an outline of their responses expressed as percentages:

Table 5: Most Underestimated Critical Success Factors: Consultants

<table>
<thead>
<tr>
<th>Critical Success Factor</th>
<th>Most Underestimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Resource</td>
<td>20%</td>
</tr>
<tr>
<td>Sufficient funding</td>
<td></td>
</tr>
<tr>
<td>Robust Project Management and Governance</td>
<td></td>
</tr>
<tr>
<td>Effective Change Management</td>
<td></td>
</tr>
<tr>
<td>Senior Management commitment and sponsorship</td>
<td>80%</td>
</tr>
<tr>
<td>Appropriate available data</td>
<td></td>
</tr>
<tr>
<td>Appropriate training/adequate skills transfer</td>
<td></td>
</tr>
</tbody>
</table>
Example of supporting comments:

“The key issue in LG is that most managers don’t! – they see all the things a manager should do such as performance review, skills monitoring, absence control etc as HR’s job. A critical success factor in HCM is manager involvement in process. This gives two key issues that are frequently overlooked – managers are rarely forced to do this (this requires top level buy in) and do not receive enough(any) training on their involvement in processes”

**Drivers for Change**

As in the Participant’s survey (Table 1), Table 6 represents the Consultants’ responses in identifying which elements are typically identified as Drivers for Change. In comparison with Practitioners, 1 and 4 are also identified as primary drivers.

**Table 6: Drivers for Change: Consultants**

<table>
<thead>
<tr>
<th>Q. #</th>
<th>A need to improve the quality of HR services to the business and, at the same time, reduce overall HR delivery costs</th>
<th>YES</th>
<th>NO</th>
<th>SOMETIMES</th>
<th>DON’T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80%</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Provide a system which supports the identification, selection, deployment, development and retention of people to support the needs of the business</td>
<td>60%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Provide a foundation for promoting personal development, growth, career satisfaction and appropriate reward for employees</td>
<td>60%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Enable the elimination of fragmented, redundant and labour-intensive processes traditionally identified with traditional HR functions</td>
<td>80%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Provide the ability to report on and analyse HR and payroll related information (e.g. operational and management reports) from a single source</td>
<td>40%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>
**Project Management**

With regard to questions in relation to a typical timeline for the project, of the 80% responses, underestimation of the effort was identified as an issue, as was commonly the impact of “scope creep”:

“initial project plans are realistic for ‘in scope’ work. However, a lot depends on the setting the correct expectations/plans during the sales cycle and clearly stating/understanding what is in scope.”

“They are never realistic ... most are considered to be like a software refresh and whilst time is spent on the technology not enough is assigned to process change and/or training.”

In order to identify potential links between Lessons Learned and Critical Success Factors, as with the Practitioners, the Consultants were asked to what degree they would consider any of the following to be contributory factors in delays in implementation or the abandonment of certain elements:

**Table 7: Critical Success Factors: Consultants**

<table>
<thead>
<tr>
<th>Category Group ID</th>
<th>(Developed from Conceptual Model Based on Ashbaugh &amp; Rowan 2002)</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Change in business strategy/priorities</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>10.2</td>
<td>Lack of appropriate people participating full time</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10.3</td>
<td>Lack of project funding (e.g.: budget not provided as per original Business Case)</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.4</td>
<td>Escalation in cost from original Business Case</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10.5</td>
<td>Lack of project team skills or knowledge of the system</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>10.6</td>
<td>Poor Project Management and governance</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.7</td>
<td>Lack of business engagement</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10.8</td>
<td>Lack of operational support team skills (for implemented functionality)</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10.9</td>
<td>Unrealistic expectations</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>10.10</td>
<td>Poor process design</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>10.11</td>
<td>Lack of strategic context of growth and expansion</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>10.12</td>
<td>Lack of appropriate data/content</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>
“Poor Project Management and Governance” is identified as the strongest factor overall, corresponding with their view that this is also the most underestimated.

**Change Management**

When asked to evaluate the typical Change Management techniques deployed in Public and Private Sector both during and beyond the project lifecycle and to identify any significant differences which they believed might impact on success, 60% of the Consultants suggested that Public Sector approaches were less controlled than those of the Private Sector:

> “I usually find that change management is viewed as a “nice to have” and there is more emphasis on implementing the new system rather than designing the new processes to support the delivery of the envisaged benefits. I have not seen typical change management techniques deployed in either the private or public sectors but there are examples of good practice in a few organizations.”

With regard to the HR Function itself, 60% considered that it normally adapts well to using the system but that it “fails to communicate this” and find it challenging in making the rest of the business adapt also. In contrast, 40% indicated a resistance to change within the function:

> “Most carry on doing what they have always done but with a newer, prettier version of what they had before”.

<table>
<thead>
<tr>
<th>Category Group ID</th>
<th>(Developed from Conceptual Model Based on Ashbaugh &amp; Rowan, 2002)</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.13</td>
<td>Lack of shared vision</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>10.14</td>
<td>Lack of support from Implementation Partner/consultants</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
**Functionality**

With regard to the issue of unused system functionality, 100% of the Consultants agreed this to be a common experience and the typical reasons they provided are covered in the following Respondent’s summary:

“There are a number of reasons for unused functionality:

1. Lack of understanding of the system and its component parts
2. Lack of understanding how the system can support process improvement
3. The system is implemented in a phased approach and the final phases of the project are abandoned or cancelled, resulting in unused functionality
4. Organizations listen to the Vendor’s sales people and buy a system that has more functionality than the business requires”.

**Resource**

The Consultants were also asked for their viewpoints on whether, in general, post-implementation operational support costs and responsibilities are adequately assessed in the Business Case and, of the 80% responses, 75% considered it to be underestimated:

“The cost of ownership is typically underestimated and the return on investment calculations is over estimated. The cost (and duration) of post-implementation support ….is often underestimated.”

**4.4 Summary**

The findings relate to all of the research aims in terms of highlighting components that have emerged from the literature review, contributing strongly to establishing and extending key theories of Critical Success Factors in e-HR transformation within the Public Sector. The findings from the survey provide a rich source of data from which, in the next chapter, a range of conclusions can be drawn. These
conclusions will be considered in relation to the theory identified from the literature review and will lead to recommendations in the final chapter.

5 Analysis and Conclusions

5.1 Introduction

The intention of this chapter is to make some contribution to the existing body of knowledge by summarising what was known prior to this study and what is known following a detailed analysis of the researcher’s findings. It will draw from the earlier literature review, reconsider the conceptual model in Chapter 2 (Appendix A) and will also evaluate the methodology adopted within this research. This chapter serves to draw conclusions from the research and indicate the implications for UK Public Sector e-HR service provision. Finally, the opportunity for further research will be discussed, leading to the final chapter where recommendations will be outlined.

5.2 Critical evaluation of adopted methodology

In relation to critically evaluating the adopted methodology, Chapter 3 outlined the justification for the adoption of a part-realist, part-interpretivist stance within the largely qualitative and partly quantitative research paradigm. Combining a realist and interpretivist stance in the research reported here has enabled a degree of access to the participants’ own subjective perspectives, taking into account their experiences, the events and the associated mechanisms (Johnson and Duberley, 2000: pp 150-156).

Certain limitations of the research methods have to be acknowledged, not least the volume of responses. It must also be acknowledged that, with regard to the Practitioner group, the findings reflect a smaller scale research project than was proposed at the outset. Every effort was made to cover as large a number of User Group members as possible and therefore the smaller level of responses does allow for some criticism. Such a mixed level of engagement is likely to have been attributable firstly, to the mode of administration of the questionnaire and to the fact
that the target participants were from organisations spread across the UK. Ultimately, the number of positive responses received at the initial contact was higher than the number finally received on the actual issue of the survey. With regard to the approach taken, contacting the targeted participants on an individual level at the outset of the project allowed the Researcher to connect with them on a personal note and take an initial judgement of those likely to complete the process, although unfortunately (and possibly because of the very nature of the urgency of their role and work in such projects) many who confirmed a willingness to contribute did not ultimately participate. In some cases, they had moved on to another role or organisation and, in others, they had to seek but did not receive authorisation. To address this, the researcher expanded the invitations to the wider audience of 39 Public Sector Members (26 LGA’s specifically had been contacted). Notwithstanding this, on reflection, although the analysis of the data relating to the quantitative questions was relatively straightforward to assess, the diversity and scale of the responses to the qualitative-type questions was more manageable. In contrast, all Consultants approached participated with little delay.

A key critical question to pose of the findings and conclusions from the use of the questionnaire is their credibility and reliability. Some concerns must be registered in relation to the “completed” survey. To mitigate the risk of receiving incomplete data, although coded questions included the option to record “don’t know” responses or to add additional free-text comments, a small number of categories were not completed which compromised the data analysis in parts. Also of concern was that the combination of pre-coded and open questions generated a mixture of data which required extensive cross-referencing to establish potential subjectivities, particularly in relation to the implementation timeline itself. The quantity of data engendered by this questionnaire is mixed, again relating to their experience and status of the project itself and in some cases sections were left incomplete or with a “too early to say” type response. However, the reflective quality of participants’ responses was good and responses were candid, typified by one Practitioner’s response with regard to attitudes to Change Management within his organisation compared to his perception of Private Sector:

“From this organization I’d say that there could be a greater resistance to change – or less willingness amongst management to enforce change.
There also seems to be a greater tolerance to non-compliance with process and procedures than might be expected in the private sector.”

With the above critical evaluation of the methodology in mind, conclusions about the research aim and objectives will be discussed below.

5.3 Conclusions about each research aim

Based on a critical analysis of contemporary literature, the primary aims of this research have been to:

i) evaluate the relevance and contribution of Critical Success Factors within the arena of e-HR Transformation projects in the UK Public Sector and, in exploring their usage and significance;

ii) identify whether there may be any uniquely related to the activity that might be fostered more systematically within the UK Public Sector than is perhaps currently the case.

In reviewing these aims, the Researcher will compare the theory and practice (with potential distinctions complemented by the comparisons of the Practitioners and Consultants.

5.3.1 Research aim (i)

It is useful at this stage to reflect on the Drivers for Change in relation to e-HR Transformation Projects. Early predictions of the impact of computers on organisations ranged from 'human - computer symbiosis' to automation and the collapse of jobs, with findings from subsequent research showing that there was some evidence for all predictions that were made (Eason, 2001). This research study supports the findings from the literature review in that drivers continue to stem mainly from a desire to achieve process and cost efficiencies, albeit with mixed success. Where costs had not been the driver, opportunities had been exploited:
“Our driver was around deployment. We had no pressure to reduce our headcount (although appreciated the efficiencies where they occurred naturally).

Similarly, another commented that “targets set the outset were exceeded” as they “moved further towards a ‘real’ centralised service”. In contrast, others indicated less successful results to date:

“Yes we did assume a reduction in our HR administrative headcount but this never materialised as some additional process were implemented and the reporting outcomes expected were not always achieved, and sometimes created additional tasks.”

Although this ambition may be considered unsurprising and welcome in that it echoes the Government political agenda, given the nature of the system and its functional caretakers, from the Practitioners’ perspectives there is a stark contrast in the relatively limited connection to a wider HRM strategy in relation to the employees themselves, for example, workforce development, talent management, succession planning, retention etc, which may suggest that that HR may be more concerned about its own future than that of the employee. However, if that is not the case, then when it comes to advocating the overall business benefits and achieving business buy-in, it may be missing an opportunity to fully explore and communicate those aspects and its aspirations, this aspect also being highlighted by a Consultant:

“The benefit to be gained by employees and line management has not been sold well enough internally and not committed to.”

Similarly, it might consider how this may fit in with its strategy for rolling-out related system functionality, blending its focus to include upfront more of those aspects directly beneficial to the employee as opposed to just those associated with internal administration. Indeed, it is often those workforce-enhancing elements of functionality that are scheduled for later phases of the project and subsequently most likely to be abandoned if the project loses momentum or support in terms of both cost and organisational strategy and skill. The Consultants’ findings included a wider scope of drivers related to what may be considered “employee-centric” objectives as opposed to process although, as one Respondent commented, “these
are typical objectives but it is unusual for all five to be achieved consistently in an organization”. The reason for that disparity compared to those of the Practitioners could suggest a “disconnect” in their interpretations of e-HR Transformation and the associated benefits. In turn, it must be acknowledged that the Consultants’ experiences will be more generalist, will include Private Sector attitudes and might also be influenced by their closer knowledge of the full potential of the software from a supplier perspective.

With regard to the forecast Business Case Benefits (both predicted and achieved), again, this research reflected the mixed results identified in the literature review. Although 91% of the Practitioner Respondents confirmed that the Business Case had been based on an assumed headcount reduction within the HR environment, this was not always confirmed to have been achieved. The findings of this research take into consideration the fact that not all of the Respondents’ e-HR projects were “complete” or even underway.

At this point, it is interesting to reflect on the data in Table 8 (below) where several points can be noted in relation to e-HR Transformation plans in general. For example, there is no regular correlation between the point at which an organisation determines to embark on the introduction of Self-Service compared to when it embarked on its initial system transformation, nor does it appear to be connected to the number of employees and their level of PC access. Although this may be expected of the larger groups (e.g.: ID:15), comparing ID:PS1 to ID:1 would suggest there is little commonality in trend.
<table>
<thead>
<tr>
<th>ID Number</th>
<th>HCM Initial Implementation*</th>
<th>Number of Employees</th>
<th>Employees with Access to a PC = %</th>
<th>Self Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2004</td>
<td>18,000</td>
<td>50%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>2</td>
<td>1998</td>
<td>7,000</td>
<td>No Response</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>3</td>
<td>2002</td>
<td>13,000</td>
<td>20%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>4</td>
<td>2006</td>
<td>13,000</td>
<td>60%</td>
<td>Planned</td>
</tr>
<tr>
<td>7</td>
<td>2003</td>
<td>14,500</td>
<td>40%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>13</td>
<td>1994</td>
<td>17,000</td>
<td>50%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>15</td>
<td>2004</td>
<td>37,000</td>
<td>No Response</td>
<td>Planned</td>
</tr>
<tr>
<td>16</td>
<td>2007</td>
<td>6,000</td>
<td>40%</td>
<td>Planned</td>
</tr>
<tr>
<td>PS1</td>
<td>2000</td>
<td>10,000</td>
<td>100%</td>
<td>Planned</td>
</tr>
<tr>
<td>PS5</td>
<td>2007</td>
<td>5,500</td>
<td>65%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>PS10</td>
<td>2002</td>
<td>350</td>
<td>90%</td>
<td>Live/ongoing</td>
</tr>
<tr>
<td>PS12</td>
<td>2007</td>
<td>9,000</td>
<td>75%</td>
<td>Live/ongoing</td>
</tr>
</tbody>
</table>

* Represents the date they first implemented any part of their existing system and their move toward system and process transformation.

Furthermore, given that the typical expectations in relation to a full e-HR Transformation project is generally advocated by the Consultants to be around 18 months, none of the organisations indicated that full transformation had been achieved. In this regard, “full” would assume all typical components of an HRMS e.g.: Recruitment, Core HR & Payroll, Training, Performance Management, Self-Service etc. In view of the drive for efficiencies having been at the forefront of many of the business cases for such projects, progress would appear to be slower than anticipated.

Therefore, is 18 months a dream? How long should full transformation take? This ultimately depends on the organisation’s decision on the processes within scope and its attitude and ability to change. Based on information established from the overall survey, the Researcher has made certain theoretical assumptions as to the potential reasons associated with these various factors. The timeline for transformation can be driven by various factors, including the advice and support level of the implementation partner and the expectations of the project sponsor; however, achieving such a timeline is dependent upon many things, all of which might be
assumed to fall under the wide banner of “project management”. The Business Case itself will be based on certain ambitions, not least of all financial, and will also include an estimated project cost to achieve those ambitions. Naturally, to achieve a Return on Investment, it is essential that the project costs are kept to a minimum and the drive for a quick delivery time is usually the by-product. That said, it may also be the ethos of the organisation itself to drive in radical change at a harder pace, particularly when radical change is a regular experience for them. Ultimately, the pace for implementation is driven by the leaders within the organisation, not least of all the Project Sponsor, and it is the role of the Project Board to monitor the achievability of that pace by ensuring that factors critical to its success are established. To this end, it is therefore essential that those Critical Success Factors are known and acknowledged by all.

It is perhaps encouraging to note that the relatively slow pace of transformation might be attributed to the recognition by the organisation that “readiness” for change is paramount and that possibly the absence of certain Critical Success Factors themselves have led to a decision to roll-out functionality at a manageable pace. However, there is also evidence to suggest that once the basics of Self Service have been implemented (which could mean relatively few elements such as access to online payslips, managing personal data etc.), addressing some of the larger scale processes (e.g.: recruitment, training, etc.) are ultimately managed as individual projects over a series of years and that a “big bang” approach is not commonly undertaken.

The literature review also highlights the risk of organisations buying software as a “bundle” and so it is essential that it is aware of whether this is the most cost-effective fit for their own plans, particularly if software is purchased and ultimately remains unused. Indeed, the findings from this study revealed that 33% of organisations considered it unlikely that they would fully utilise all purchased components of the software. Not only do organisations knowingly buy excess functionality by means of a package, there is also the risk that, where it is purchased with intent for use, it may remain unused through ignorance as indicated by one Consultant:
“Often the people …delivering the project were not those who selected it and are unaware of the additional functionality.”

Similarly, in analysing the Practitioners’ responses in relation to the reasons for slippage and the postponement or abandonment of certain elements, the primary factors included a “lack of business understanding of technical issues”, suggesting a potential issue regarding skills in relation to the system itself as opposed to the new business processes or business engagement. In addition to establishing an understanding of the typical timeline for implementing full functionality, the impact of the quality of the data on the overall delivery was explored as this aspect had been identified by the Researcher during the literature review as having a potentially high influence on success with potentially low recognition in terms of CSF’s and there is definite evidence of it having a role to play as evident in the following examples of Practitioner feedback:

“Data cleanliness underpins the success of the delivery of Manager Self Service and the availability of supervisor hierarchy information to inform workflow has meant that project work has been slowed at times but not cancelled.”

“We had huge problems with data…. Data between legacy payroll and HR has been a particular challenge. Re-organisations are still proving to be time consuming, and departments restructure without necessarily telling HR that they’ve done so. Our security model is very basic, which hampers self service development. We’ve not done anything with competencies, training records are in multiple systems, appraisals, and recruitment and annual/flexi leave are all in a range of systems.”

The Consultants on the whole take a relatively generalistic view of the causes and the impacts:

“Poor long term strategy, lack of commitment and resources (i.e. resources pulled for other activities), lack of focus, poorly managed Change Management (i.e. not measuring/achieving the defined system benefits), lack of or poor adoption within the business. Cost can also play a part where scope of the original solution has been reduced in order to fit in with budgets
(cost and time). Typically, Reporting capability is reduced (and also non-critical requirements) as a result.

When reflecting on the unexpected benefits, one Respondent’s comments serve to further support the theory that HR must avoid over-reliance on the expertise and knowledge of a small number of staff in relation to processes, either manual or system related.

“In a perverse way, an unexpected benefit was the demonstration about how poor the data was, and about the ... manual and workaround processes operated in HR and payroll. Similarly the project also illuminated, to management, the practices that had been built up, over time, which resulted in complex work practices and an excessive reliance on “business rules” which were not documented and held in the memory of a small number of people.

Where the impact of system customisation was explored, of the few comments provided, in the majority of cases there appeared a general acceptance of it being inevitable to a certain degree with the level being “as expected”, albeit with the basic tenet of having “vanilla” processes when possible.

The findings from the literature review highlighted the importance of a robust Project Management regime, with Prince 2 deemed as the de facto method for Public Sector. With regard to the findings from this study, in terms of what may be considered the most commonly identified and achieved CSF, “Project Management and Governance” was the highest rated by the Practitioners. In comparison, the Consultants indicated “Senior Management Commitment and Sponsorship” to be the most under-rated CSF. In their case, this aspect might be considered as a “catch all” definition to summarise their views in that ultimately they see the leaders have having responsibility to deliver all CSF’s. However, it cannot be concluded that e-HR Transformation is consistently undertaken using appropriate Project Management controls, with only 59% indicating a use of Prince 2 in some form. In this regard, it was interesting to note from one of the Practitioners that Project Management techniques have not been used in their environment and that the
ongoing development and rollout of self service is managed as part of the “day job” of the functional support team. In view of the fact that the Practitioners appeared to value this CSF and largely consider it to have been well addressed, there is irony in it not having been fully utilised in all cases.

This may account for the relatively low consideration and review of “Lessons Learned” throughout the project phases. Where such reviews were undertaken, there was evidence of their value, as summarised by one respondent:

“a whole list of things were documented from better governance structures, more knowledge of the system prior to implementation, more resources and priority of implementation in comparison to local requirements”.

This example may be considered to support the significance of adequately identifying CSF’s relating to resource skills and system knowledge at the outset of the project.

With regard to the significance of Change Management, the continued involvement of the business in supporting the overall e-HR Transformation strategy is critical. As the literature review highlighted the risk that Self Service can be viewed as an opportunity to offload its administration on to the employee, it is essential that good relations with Stakeholders are maintained and they have a role in achieving the overall objectives and thus, to a degree, its design. Stephenson (2006) provides a contemporary assessment of organisation structure in terms of hierarchies, networks, and heterarchies and the conflicts between bureaucracy and efficiency. As opposed to a hierarchy which may be described as a "decision-making structure that is marked by a clear ranking of actors, where subordination of institutional actors to others exists (http://www.eu.newgov.org/public), a heterarchy is a "network of elements which share the same horizontal position level in a decision-making system". Stephenson warns of the pros and cons of heterarchy which relies on a "well designed and coordinated network ensuring alignment and common connection largely through performance measures". Although they can often be "seedbeds... for ineptness", they may "portend a premier form of 21st Century government". However, in advocating its potential ability for people to "solve a
complex task or achieve a grand design", the theory does not make any comparison to existing project management principles in this regard and it could be argued that those principles historically assume such organisational cooperation to be essential. However, his observation that "technology without trust is just traffic", although in reference to the need for effective communication in networking, may be considered equally relevant.

The findings from this research study indicated a high awareness by the Practitioners of Change Management as a CSF, with training, system access and stakeholder management being key themes. However, although recognised as a CSF, there were inconsistent approaches to Stakeholder Analysis or formal surveys post-implementation and it is possible that, as a consequence of the long implementation periods, insufficient monitoring is undertaken in the later phases and assessments are deferred.

Where mixed or poor reactions had been identified, the wider strategic issues relating to the organisation and ERP programmes in general would appear to be at the root of the cause. The example below has echoes of Stephenson’s (2009) views on the causes of conflicts between bureaucracy and efficiency and the criticality of resource can again be evidenced.

"Generally the perception is not good – even though we delivered a dozen modules on time, to cost and to scope. The perception is a combination of delays to payroll, non delivery of self service, poor delivery of cashable benefits. However, senior managers’ perception is that the delivery project went reasonably well. Perhaps more uniquely to the public sector (than the private sector) the project (and programme) was started under one political administration and completed under another, but rather than leading to consensus about the programme, the programme has found itself as a political football, and thus a considerable amount of adverse local press coverage. This then led to adverse opinion amongst staff and managers across the Council. Part of this is linked to the poor delivery of cashable financial benefits, and
partially due to the outsourcing of ICT staff, and this led to a strike by ICT staff during the programme’s procurement phase.

In terms of “Lessons Learned” reports, although all made reference to a common theme of underestimation of the timeline, it is not clear as to what part a consultant or implementation partner might have in the initial assessment. From the perspectives of both groups respectively, the majority believed that Change Management within Public Sector would benefit from the techniques deployed within the Private Sector:

“In Public sector whatever they try will always fail without some outside agency input – they are often too scared of offending people or putting jobs at risk to manage this effectively – also the decision process by committee will get in the way of this process."

“Process review and change is tough in Public Sector, combined with the ‘we are a unique authority etc.,’ causing bespoke and unique requirements to be developed, some of which are actually unnecessary. The Commercial sector is more likely to remove the anomalies and work to a standard than Public Sector, generally.”

Finally, both Practitioners and Consultants were asked whether they would consider there to be any issues peculiar to the Public Sector as opposed to Private Sector which may impact on e-HR Transformation Projects. A common thread throughout the responses related to the limitations in access to technology. In addition, Public Sector accountability and cost was highlighted and “value for money indicators” being a key factor. With regard to change management, general perceptions were that this would be an easier process, with Public Sector suffering from complexities in terms and conditions and a slow decision making process:

“The nature of the Private Sector culture allows an Organisation to impose change and all staff are required to implement this change to the deadline specified. In the Public Sector there is a natural leaning to a more democratic approach, i.e. requiring service departments to be “brought on board” as part of the programme. This can lead to delay and mean that all the benefits may not be fully realised”.
“Put quite simply – profit! Whilst we need to look at utilizing services efficiently, we are not required to provide a positive balance at the end of the financial period. There are inevitably constraints unique to Public sector implementations around “decision by committee” which does not apply to Private Sector – where most key decisions are made by an individual in quick time.”

5.3.2 Research aim (ii)

The findings of this research clearly demonstrate evidence to suggest that Resource requirements to support the system in operation can be underestimated within the Business Case and may remain an unknown quantity during a full programme of activity. When asked to consider the most influential CSF’s in terms of Lessons Learned, “Lack of Project Team Skills or Knowledge of the System” garnered the most responses, followed closely by “Lack of Appropriate People Participating Full Time”. Similarly, ratings relating to “Lack of Project Funding” indicate a further link to this aspect with regard to a potential lack of funding for either resource in general or investment in the training of those resources. By comparison, although the Consultants viewed “Poor Project Management and Governance” as the strongest factor overall, 80% also rated “Lack of Appropriate People Participating Full Time” as highly influential.

In contrast to resource skills from the project perspective, questions posed in relation to “operational support team skills (for implemented functionality)” obtained fewer responses, although further assumptions may be considered in relation to that output; for example, given the status of the implementation projects themselves with the majority being still in progress, potential issues in relation to operational support may be less evident as the “project team” may still be in situ.

Not all of the Consultants viewed Senior Management Commitment and Sponsorship as the most underrated CSF and the importance of Dedicated Resource was also recognised as the other main factor:
“For most of my projects, the use of resources is usually underestimated, particularly on the functional side, as most resources are usually assumed to be able to provide the necessary expertise while still ‘keeping their day job’, that is trying to do a deployment, which requires at least 80% participation initially, to 100% participation towards the conclusion of the project, and continue to do what is expected on their permanent roles”.

Not only is the impact of this is likely to be seen on the Business Case benefits forecast and the overall Return on Investment calculations but it may also impact on the progress of development of the remaining project components. In turn, successful skills transfer within the project team itself and handover to the organisation will be impeded with stark consequences:

“We outsourced out ICT as part of the programme so have no view about the ICT technical support skills and resource requirements. Internally we have 3 people in a central support team, which is 3 more than we planned. We have a dispersed super user community, and they take on this role “on top of the day job”, with variable amounts of enthusiasm. There has been virtually no external training since go-live in 2006.”

“We have recently expanded our team of Tech and Functional Developers to cope with additional requirements from the business.”

Some of the most telling observations were in relation to HR’s own ability to adapt to the new processes and the following reports evaluations of the relative success of change management within its organisation has echoes of Kossek’s (1994) description of HR’s tendency to the “ghettoize” its system experts:

“Very well in terms of the central transactional teams who do the most work within the system. Our business facing HR teams have been less successful and I would put this down to them not understanding the process change that has come with the new system and fully grasping that there are new ways of working.”
5.3.3 Summary of Research Aim (i)

With regard to an evaluation of the relevance and contribution of Critical Success Factors within the arena of e-HR Transformation projects in the UK Public Sector, there is clear evidence from both the literature and this research study to suggest that there is an existing weakness and inconsistency in approach. In terms of further potential distinctions in comparison to Private Sector, a range of views was given with almost and equal split on opinions. Whereas some believe that “the principles are the same whether it is the public or private sector”, others referred to idiosyncrasies which may lead to the need for unique CSF’s. From the researcher’s own experience in both Public and Private Sector implementations, although internal politics and personal political agendas can hinder progress in both arenas, as in general longer-serving staff are more resistant to change, the Private Sector is more ruthless in tackling resistance and compliance with change can form part of the Performance Management process. In the year of a general election, 2010 sees all political parties focus on Public Sector efficiencies and reform as paramount in economic recovery and this will inevitably filter into a review of local area BPR and ERP systems with the spotlight heavily on results. Therefore, before embarking on an e-HR Transformation Project, those organisations must be fully aware of the CSF’s, not only in terms of ensuring that the Project Team and stakeholders are aware of their relevance in delivering a quality product but also in ensuring that its quality and success is sustainable.

5.3.4 Summary of research aim (ii)

In determining whether there may be any CSF’s uniquely related to e-HR Transformation Projects that might be fostered more systematically within the UK Public Sector than is perhaps currently the case, the most relevant literature informing this inquiry has been that associated with the influence of dedicated and skilled resource both during and beyond the project. The International Journal of Human Resource Management (2009) reports that one of the most significant challenges faced by HR executives today is measuring the performance of their system in order to justify the value-added contribution in accomplishing the organisation's mission. Indeed, in considering the concepts of e-HR consequences, the "researchability of consequences" refers to the feasibility of undertaking
empirical research in this regard where differences in the "human usage of technology" is a contingent factor. In their assessment of the key issues and challenges, they suggest that its introduction "increasingly calls for an integration of diverse expertise, interdisciplinary comprehension and modernisation of the HR profession", resulting in the need for HRIS specialists. They also encourage research into the "integrative consequences of deploying e-HRM in organisations".

In summary, for an e-HR Transformation Project to be successful, an organisation must ensure that it fully considers the impact that the new system will have not only on the employee population (self-service users) but also on the resource required to support the system.

5.4 Conclusions about the research aims

Drawing conclusions “requires a creative leap by generalising one’s data” (Mintzberg (1979), cited by Fisher, 2007 p: 309). The conclusion is that based on the information drawn from the literature and this research, Critical Success Factors for e-HR Transformation within the Public Sector may be formed by extending the basic conceptual model as it is reasonable to proffer the view that there are a number of CSF’s which may be specifically linked to e-HR Transformation. The Conceptual Model on which this research was undertaken was inspired by the assessment of the work of Ashbaugh and Rowan (2002) which identified key elements that encapsulate the themes and conclusions regarding most common failings attributed to HR Technology projects. Following the analysis of the findings of this study, Appendix B provides a revised Conceptual Model which effectively translates and enhances the original principles into appropriate CSF’s which may provide a useful toolkit for the implementer. Table 9 (below) provides a summary:
Table 9: Critical Success Factors for e-HR Transformation Projects

<table>
<thead>
<tr>
<th>CSF: ID</th>
<th>Critical Success Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSF:1</td>
<td>Sufficient Project Budget</td>
</tr>
<tr>
<td>CSF 2</td>
<td>Adequate Implementation Preparation</td>
</tr>
<tr>
<td>CSF:3</td>
<td>Realistic Timeframe During the Project</td>
</tr>
<tr>
<td>CSF:4</td>
<td>Effective Implementation Strategy</td>
</tr>
<tr>
<td>CSF:5</td>
<td>Dedicated Project Resource</td>
</tr>
<tr>
<td>CSF:6</td>
<td>Effective Change Management</td>
</tr>
<tr>
<td>CSF:7</td>
<td>Product Knowledge</td>
</tr>
<tr>
<td>CSF:8</td>
<td>Effective Operational Support Plans</td>
</tr>
<tr>
<td>CSF:9</td>
<td>Senior Management Commitment</td>
</tr>
<tr>
<td>CSF:10</td>
<td>Effective Project Management</td>
</tr>
<tr>
<td>CSF:11</td>
<td>Data Quality</td>
</tr>
</tbody>
</table>

5.5 Limitations of the study

This research study is limited in that further research and discussion is needed to explore the diversities highlighted in Table 8. The sample size and limits of time are factors that affect the strength of this project.

5.6 Opportunities for further research

Further research is recommended into the breadth of change undertaken within UK Public Sector e-HR Transformation Projects. Even with an awareness and adoption of a CSF framework, comparative success amongst, for example, Local Government Authorities may still be subjective as it is dependent upon the scope. In addition, based on feedback from the Consultants, the ability to easily and consistently benchmark in-house performance, process by process against all market sectors’, is becoming more expected and demanded. Therefore, with regard to emerging trends, an initial exploration of the strategic plans of the Software Suppliers reveals that they have themselves learned lessons specifically in relation to UK Public Sector and several are using this as an opportunity to develop tailored system processes based on the relevant Performance Indicator and Benchmarking requirements related to a Balanced Scorecard approach.
6 Recommendations

Significantly, in highlighting the importance of organisational readiness as a state wherein the stakeholders and new processes are aligned to achieve the desired business results, Leszczewicz (2009) suggests further that an organisation must realise that change never ends. Once the business goal has been achieved, the cycle must begin again in reviewing areas of improvement. In the case of e-HR Transformation, although such change is likely to be radical at the outset, the manner in which each Public Sector organisation may deliver later functionality may range from the more gradual, incremental “Kaizen” model (Imai, 1986) to the punctuated equilibrium paradigm (Gould, 1978) whereby “deep structures” permit only limited incremental change, and periods of revolution in which these deep structures are “fundamentally altered”, implying a more reactionary element in some cases. Therefore, sustaining the appetite for change over several years calls for careful attention given both the investment and scrutiny implications (Hayes, 2007: p.355).

Public Sector managers must define the output of a particular service in order to assess whether or not their service is performing within value for money objectives of economy, efficiency and effectiveness (Coombs and Jenkins, 2002). However, they must think carefully of the impact on its own resource before exploring the apparently tempting opportunities of offering services to other organisations for profit. In view of the size of the investment, the purchase of the software itself should be limited to that which is actually required unless it is cost effective to do so. Where software is purchased, they must be aware of its capabilities for the future and exploit it as much as possible. They must ensure the HR team itself can operate the system and avoid the creation of a silo of expertise, keeping knowledge and skills up to date. Finally, they must take advantage of the experience of others who have been through it in both Public and Private Sector. With regard to Consultants and Vendors, although it is easy to be cynical about their objectives, they have wealth of experience and can often see the bigger picture more clearly.


Encyclopaedia of Human Resources Information Systems: Challenges in E-HRM by Teresa Torres-Coronas, Mario Arias-Oliva Edition: illustrated Published by Idea Group Inc (IGI), 2008 ISBN 1599048833, 9781599048833


HR, not IT, can extract maximum value from technology.  


Institute for Employment Studies/Institute for Personnel and Development (IES/IPD) (1999), Annual Survey Results, IES and IPD, Brighton and London.  


Leonard, D. & McAdam, R. (2000). Grounded theory methodology and practitioner reflexivity in TQM research, University of Ulster, UK.


http://www.eu-newgov.org/public

www.ogc.gov.uk

http://www.postgrad_resources.btinternet.co.uk/student-resources
### Appendices

**Appendix A: Conceptual Model:**

<table>
<thead>
<tr>
<th>ID</th>
<th>Failings related to HR Technology Projects. Factors Identified by Ashbaugh &amp; Rowan (2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Insufficient Project Budget.</strong> Leading HRMS packages are expensive to acquire and implement. Software license costs, hardware, implementation consultant costs, training, and internal costs of government staff make up the project budget. Governments often mis-specify the project budget especially in the areas of training and costs related to &quot;backfilling&quot; government staff focused on implementation (e.g., getting other personnel to do the work of those that are focused on implementing the system).</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Inadequate Implementation Preparation.</strong> To begin the project on time, a number of activities must take place at the government site. Facilities planning, design of the technical environment, change management, securing funding and/or financing, and project team staffing decisions are some of the major factors that must be managed to get the project off to a smooth start.</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Unrealistic Timeframe Driving the Project.</strong> Rapid implementations are unrealistic for large organizations simply because the degree of change being imposed requires time to assimilate and communicate. HRMS implementations take about the same amount of time as the implementation of financial modules. Those seeking to rush the system implementation forego many of the benefits (i.e., best business practices, ability to redesign business processes and increase productivity, workflow, employee self-service) that formed the basis for the Return on Investment calculations that justified system acquisition.</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Poor Implementation Strategy.</strong> This risk factor refers to the miscalculation about the approach used to roll out the software. While a six-month &quot;big bang&quot; implementation (i.e., all modules put into production at once) may decrease the total duration of the project, it is also an approach that is unrealistic for many large and complex organizations given the fact that governments struggle to adequately staff projects.</td>
</tr>
<tr>
<td>ID</td>
<td>Failings related to HR Technology Projects. Factors Identified by Ashbaugh &amp; Rowan (2002)</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Inability to Staff the Project.</strong> Regardless of which solution is implemented, the governments are required to dedicate a significant amount of staff resources to the project on a full-time basis. Due to the scope and magnitude of the project, governments run the risk of &quot;shirking&quot; on contractual commitments with vendors by substituting less qualified people or expecting the project team members to do so much of their routine work to the point that their project participation becomes difficult to predict.</td>
</tr>
<tr>
<td>6.</td>
<td><strong>Change Management Needs Not Anticipated.</strong> Since the implementation of a new system is going to have a profound impact on the entire organization, it is important for the government to assess the organization's readiness for change on cultural, environmental, and technical levels. Training, communication of process change, organizational restructuring, and job role analysis are examples of such activities. Without adequate investment in this area, end-user perceptions of the software are likely to be poor and erode over time.</td>
</tr>
</tbody>
</table>
## Appendix B: Revised Conceptual Model

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Insufficient Project Budget.</strong> Leading HRMS packages are expensive to acquire and implement. Software license costs, hardware, implementation consultant costs, training, and internal costs of government staff make up the project budget. Governments often mis-specify the project budget especially in the areas of training and costs related to &quot;backfilling&quot; government staff focused on implementation (e.g., getting other personnel to do the work of those that are focused on implementing the system).</td>
<td>All aspects identified by Ashbaugh &amp; Rowan (2002) were supported by the research findings. <strong>CSF1: Sufficient Project Budget</strong></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Inadequate Implementation Preparation.</strong> To begin the project on time, a number of activities must take place at the government site. Facilities planning, design of the technical environment, change management, securing funding and/or financing, and project team staffing decisions are some of the major factors that must be managed to get the project off to a smooth start.</td>
<td>All aspects identified by Ashbaugh et al (2002) were supported by the research findings. <strong>CSF2: Adequate Implementation Preparation</strong></td>
</tr>
<tr>
<td>3.</td>
<td><strong>Unrealistic Timeframe Driving the Project.</strong> Rapid implementations are unrealistic for large organizations simply because the degree of change being imposed requires time to assimilate and communicate. HRMS implementations take about the same amount of time as the implementation of financial modules. Those seeking to rush the system implementation forego many of the benefits (i.e., best business practices, ability to redesign business processes and increase productivity, workflow, employee self-service) that formed the basis for the Return on Investment calculations that justified system acquisition.</td>
<td>All aspects identified by Ashbaugh &amp; Rowan (2002) were supported by the research findings. <strong>CSF3: Realistic Timeframe Driving the Project</strong></td>
</tr>
</tbody>
</table>
4. **Poor Implementation Strategy.** This risk factor refers to the miscalculation about the approach used to roll out the software. While a six-month "big bang" implementation (i.e., all modules put into production at once) may decrease the total duration of the project, it is also an approach that is unrealistic for many large and complex organizations given the fact that governments struggle to adequately staff projects. In addition to those issues identified by Ashbaugh & Rowan (2002), it is recommended that an organisation also considers the appropriate order of roll-out for the remaining modules as providing functionality which is useful to both the employee and manager self-service user can be an enabler in securing positive feedback and increasing appetite for change. Similarly, undertaking a Lessons Learned assessment following each Phase will provide the opportunity to take stock of both Project Team and Stakeholder issues, thus improving the basis for subsequent Phases.

CSF 4: Effective Implementation Strategy

5. **Inability to Staff the Project.** Regardless of which solution is implemented, governments are required to dedicate a significant amount of staff resources to the project on a full-time basis. Due to the scope and magnitude of the project, governments run the risk of "shirking" on contractual commitments with vendors by substituting less qualified people or expecting the project team members to do so much of their routine work to the point that their project participation becomes difficult to predict. All aspects identified by Ashbaugh & Rowan (2002) were supported by the research findings.

CSF 5: Dedicated Project Resource

6. **Change Management Needs Not Anticipated.** Since the implementation of a new system is going to have a profound impact on the entire organization, it is important for the government to assess the organization's readiness for change on cultural, environmental, and technical levels. Training, communication of process change, organizational restructuring, and job role analysis are examples of such activities. Without adequate investment in this area, end-user perceptions of the software are likely to be poor and erode over time. In addition to those issues identified by Ashbaugh & Rowan (2002), it is recommended that an organisation engages key business leaders in the capacity of “Change Champions”, an essential role in supporting the Stakeholders, underpinning the cultural change and implementation of the new processes. Most importantly, given that the transformation programme may expand years, a core group must not be allowed to dissipate after the initial implementation and should be replaced on staff.
<table>
<thead>
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</thead>
<tbody>
<tr>
<td></td>
<td>Critical Success Factors for e-HR Transformation</td>
</tr>
<tr>
<td></td>
<td>turnover. Similarly, awareness of the Programme and its links to the organisation’s strategy should be part of the Induction for all new starters as a clearly understood case for change is essential. This must be underpinned by a benefits case and clear ownership of benefits delivery plan.</td>
</tr>
<tr>
<td></td>
<td>In order to avoid both development and ongoing support costs, Process Design must be based on a principle of utilising the “vanilla system” to its best advantage, with customisation only considered when either the system is non-compliant or in the event of a sound business case.</td>
</tr>
<tr>
<td></td>
<td>CSF 6: Effective Change Management</td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>To ensure it fully exploits the technical investment, an organisation must have a comprehensive knowledge of the software it has selected, including all functional modules purchased and their capabilities. Given the potential timeline involved, it is also important that this knowledge is transferred as turnover of staff can result in loss of knowledge. Similarly, to minimise reliance on the Software Vendor, there must be an awareness of the maintenance required in supporting the system and its own self-sufficiency in this regard e.g.: the complexity of its configuration, the expected levels of upgrades etc. It must take into consideration the scalability of the software and its capacity to fulfil the future needs of the organisation and emerging trends in technological innovation. In this regard, affiliation with an appropriate User Group a continued communication with the Vendor is also recommended. <strong>CSF 7: Product Knowledge</strong></td>
</tr>
<tr>
<td>8</td>
<td>In order to ensure the most efficiencies and benefits, the design of the new HR Structure will have an influence on the design of the system process and vice versa. The findings of this research indicate a regular underestimation in the assessment of resource requirements particularly in relation to support of the system post-implementation i.e.: their roles, numbers, competencies, skills and training requirements. <strong>CSF 8: Effective Operational Support Plans</strong></td>
</tr>
<tr>
<td>----</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Senior management commitment can become problematic towards the middle to end of projects as enthusiasm wavers or problems become real. Keeping that commitment becomes paramount to ensuring the ultimate success of the project.</td>
</tr>
<tr>
<td></td>
<td><strong>CSF: 9 Senior Management Commitment</strong></td>
</tr>
<tr>
<td>10</td>
<td>As the implementations can often be undertaken in a phased approach over a number of years, it is important that the overall programme of activity maintains appropriate project management techniques and controls. Furthermore, unless there is a consistency in the Project Team and Project Manager resource, it is essential that the overall strategic objectives and Business Case are transferred to (and understood by) successors.</td>
</tr>
<tr>
<td></td>
<td><strong>CSF: 10 Effective Project Management</strong></td>
</tr>
<tr>
<td>11</td>
<td>Not only must the data be “clean” but consideration must be given upfront to the modules to be deployed and the availability of the relevant data (e.g.: historical data from legacy systems), particularly where improved Management Information is a key expectation.</td>
</tr>
<tr>
<td></td>
<td><strong>CSF: 11 Data Quality</strong></td>
</tr>
</tbody>
</table>
Appendix C

Participant Information Sheet - Practitioner


Definitions: In essence, the term “e-HR” reflects the movement to deliver HR services to its customers via web-based technology (e.g.: Employee Self-Service).

It is generally considered that the fundamental difference between HRMS (Human Resources Management Systems) and e-HR is that the former is directed to HR itself and, thus, internal improvements, whereas the latter targets the employee group outside of HR.

Purpose of the research
This researcher (Alison Nicholas) is undertaking this research project as part of the final year of a Masters in Business Administration with the University of Chester. It is a requirement of the course to complete a project based on primary research and I have chosen the above area of study hoping that it will add to our understanding of the complexities of the subject. In transferring from private to public sector, I have experienced similarities in key issues relating to the relative “success” and progress in the implementation of e-HR and seek to investigate the extent of subjectivity regarding the issue.

Note: Although the focus of the project is “e-HR”, if your organisation has no plans to implement employee self-service, you may base your answers on the key point from which your organisation might have set out to radically transform its HR services and systems via improved technology e.g.: to a centralised HRMS, with or without “e-HR” being within that long-term vision. Indeed, your comments as to why it may not be within scope and your progress and success without it would be of additional value to the research.

Who is being asked to participate?
A combination of practitioners and consultants experienced in HR Technology projects (30 in total).

Research Methods
The specific objectives of the research are, firstly, to understand contemporary literature on the theory of e-HR Transformation projects. Secondly, to evaluate the relevance and contribution of Critical Success Factors in this area. Thirdly, to explore the usage, significance and effectiveness of Critical Success Factors in e-HR Transformation projects within UK Local Government Authorities. Finally, if Critical Success Factors are ascertained to be of importance in practice, to consider whether any may be uniquely related to the activity and might be fostered more
systematically than is perhaps currently the case through traditional project management techniques, thus making recommendations for implementers.

The research will centre on an in-depth review of academic literature, followed by a survey of the selected participant groups.

**Important information for you if you decide to take part**
Taking part in this research is voluntary and you will have the right to decline to answer any questions and/or to withdraw from the research at any time. Your responses will be recorded in electronic format you will have the right to retain a copy of your completed survey and check and verify that any information used for the purpose of the research is a fair record of your submission. All your data and responses will be handled both anonymously and confidentially throughout the research process. No reference will be made to your organisation or to the name or title of the participant. Although many of the participants are members of a particular software user group, if/when mentioned by the participant in their responses, in this researcher’s final report there will be no significance indicated or specific reference made to any particular software utilised by any organisation. A copy of the full findings can be supplied on request.

**Data**
Data collected will be analysed by me only and will be securely stored electronically.

**Contact details of researcher**
If you have any queries about this project please contact me:

Telephone: 0151 225 2475  
E-mail: Alison.Nicholas@liverpooldirectlimited.co.uk

**Guidelines for Completion of the Survey**
Included in the email is a Participant Survey. This document is produced in MS Word format and includes a series of questions for your completion, allowing for the addition of your own comments. Do not feel constrained by any format limitations within the document: if you wish to add further details, please feel free to provide supplementary information by any means of choice. All information will be gratefully received.

Please return your completed survey to the above email address by Friday 19th February 2010.

Many thanks

Alison Nicholas

Business Support Manager  
Human Resources and Payroll Service  
Liverpool Direct Limited
**Appendix D: Practitioner Survey: e-HR Transformation Projects**

<table>
<thead>
<tr>
<th>Your Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Organisation</td>
<td></td>
</tr>
</tbody>
</table>

**Q1.** Briefly describe your role in the organisation and, if applicable, the transformation project itself.

**Q2.** Number of employee records to be held on your system (approximate).

**Q3.** If using Self Service, what percentage of staff will have access?

**Q4.** Which of the following were identified as broad objectives and drivers for change within the business case (indicate x):

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>A need to improve the quality of HR services to the business and, at the same time, reduce overall HR delivery costs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a system which supports the identification, selection, deployment, development and retention of people to support the needs of the business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a foundation for promoting personal development, growth, career satisfaction and appropriate reward for employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enable the elimination of fragmented, redundant and labour-intensive processes traditionally identified with traditional HR functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide the ability to report on and analyse HR and payroll related information (e.g. operational and management reports) from a single source.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Please provide details of any others or additional comments:**

**Q5.** Did the business case assume any direct impact on HR e.g.: a headcount reduction and/or utilisation of the resources in more strategic services  If so, was this achieved or is it on target to be achieved?
<table>
<thead>
<tr>
<th>Q6. Were any of the following identified and documented as Critical Success Factors at the outset of the project?</th>
<th>Yes and Achieved</th>
<th>Yes But Not Achieved</th>
<th>Not Identified</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Resource</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient funding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robust Project Management and Governance</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Effective Change Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Management commitment and sponsorship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate available data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate training/adequate skills transfer</td>
<td></td>
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<td></td>
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</tbody>
</table>

Please provide details of any others or additional comments:

| Q7. What was the timeline for the project as indicated in the original Business Case e.g.: estimated start and finish dates for delivery of ALL work defined as “in scope”? | | |
| Q8. If applicable, was the project plan and timeline produced by or with your implementation partner/ external consultant? | | |
| Q9. How would you describe the status of the project e.g.: was it implemented on time, is it behind or ahead of schedule, were certain elements abandoned etc? | | |
| Q10. If behind schedule or plans have been abandoned, to what degree were any of the following contributory factors? | High | Medium | Low | Not Applicable |
| Change in business strategy/priorities                        | | | | |
| Lack of appropriate people participating full time            | | | | |
| Lack of project funding (e.g.: budget not provided as per original Business Case) | | | | |
| Escalation in cost from original Business Case                | | | | |
| Lack of project team skills or knowledge of the system        | | | | |
| Poor Project Management and governance                       | | | | |
| Lack of business engagement                                  | | | | |
| Lack of operational support team skills (for                  | | | | |
Q10. If behind schedule or plans have been abandoned, to what degree were any of the following contributory factors?

<table>
<thead>
<tr>
<th>Implemented functionality</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealistic expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor process design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of strategic context of growth and expansion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of appropriate data/content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of shared vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of support from Implementation Partner/consultants</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Please provide details of any others or additional comments:

Q11. Was there a particular Project Management method deployed (e.g.: Prince2)? How successfully do you consider it to have been utilised?

Q12. How successful has been the Change Management strategy throughout (and beyond) the project? What were the basic methods deployed?

Q13. Was a stakeholder analysis undertaken at the outset of the project? How accurate has this proven to be?
Q14. What is the organisation's perception of the success of the project to date? Have there been any staff surveys undertaken to gauge opinion pre and post implementation?

Q15. What impact has the quality and availability of relevant data had on the project (e.g.: organisation structure, employee data)? For example, has some development stalled or does available functionality remain unused? If so, give examples of typical functionality and reasons.

Q16. For functionality in operation, is the data efficiently maintained by the users? To what extent has Management information improved?

Q17. Will all of the purchased product components be utilised? If not, what are the reasons and how does this impact on the original Business Case and the Project Plan?

Q18. How many of the following types of staff support the system and is the level higher, lower or the same as anticipated?

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Higher</th>
<th>Lower</th>
<th>As Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Administrators/ end-user support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database Administrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Developers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Specialists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Operational Managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide details of any others or additional comments:
Q19. Were Post-Implementation operational support costs and responsibilities adequately assessed in the Business Case e.g.: resource, maintenance, end-user support etc? If not, what is your perspective of the impact?

Q20. How successfully has the HR function itself adapted to using the system? Are there any issues e.g.: lack of knowledge, resistance to change, still using old processes etc? What recommendations would you make?

<table>
<thead>
<tr>
<th>Q21. Has there been a need to customise the system and to what extent?</th>
<th>None</th>
<th>More than expected</th>
<th>Less than expected</th>
<th>As Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q22. If customisation has been more than expected, have you experienced any of the following causes and impacts?</th>
<th>Experienced</th>
<th>Not Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitability of the standard system process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unwillingness of end users to adapt to standard process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on development costs and remaining plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on operational support requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please provide details of any others or additional comments:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q23. Has a Post-Implementation or Lessons Learned report been produced for any elements to date? If so, what were key points documented?

Q24. Have there been any unexpected benefits or disadvantages not identified at the outset?

Q25. Finally, do you consider there to be any issues particular to Public Sector as opposed to Private Sector which may impact on e-HR Transformation Projects?

Thank You
Appendix E:
Participant Information Sheet - Consultant


Definition: In essence, the term “e-HR” reflects the movement to deliver HR services to its customers via web-based technology.

Purpose of the research
This researcher (Alison Nicholas) is undertaking this research project as part of the final year of a Masters in Business Administration with the University of Chester. It is a requirement of the course to complete a project based on primary research and I have chosen the above area of study hoping that it will add to our understanding of the complexities of the subject. In transferring from private to public sector, I have experienced similarities in key issues relating to the relative “success” and progress in the implementation of e-HR and seek to investigate the extent of subjectivity regarding the issue.

Note: Although the focus of the project is public sector, if your experience stems mainly from the private sector, your responses in general will still be of great value to the research.

Who is being asked to participate?
A combination of practitioners and consultants experienced in HR Technology projects (30 in total).

Research Methods
The specific objectives of the research are, firstly, to understand contemporary literature on the theory of e-HR Transformation projects. Secondly, to evaluate the relevance and contribution of Critical Success Factors in this area. Thirdly, to explore the usage, significance and effectiveness of Critical Success Factors in e-HR Transformation projects within UK Local Government Authorities. Finally, if Critical Success Factors are ascertained to be of importance in practice, to consider whether any may be uniquely related to the activity and might be fostered more systematically than is perhaps currently the case through traditional project management techniques, thus making recommendations for implementers.

The research will centre on an in-depth review of academic literature, followed by a survey of the selected participant groups.

Important information for you if you decide to take part
Taking part in this research is voluntary and you will have the right to decline to answer any questions and/or to withdraw from the research at any time. Your responses will be recorded in electronic format you will have the right to retain a copy of your completed survey and check and verify that any information used for the purpose of the research is a fair record of your submission. All your data and responses will be handled both anonymously and confidentially throughout the research process. No reference will be made to your organisation or to the name or title of the participant. Although many of the participants are affiliated with a particular software user group, if/when mentioned by the
participant in their responses, in this researcher’s final report there will be no significance indicated or specific reference made to any particular software utilised by any organisation.

Data
Data collected will be analysed by me only and will be securely stored.

Contact details of researcher
If you have any queries about this project please contact me:

Telephone:  0151 225 2475
E-mail:    Alison.Nicholas@liverpooldirectlimited.co.uk

Guidelines for Completion of the Survey
Included in the email is a Participant Survey. This document is produced in MS Word format and includes a series of questions for your completion, allowing for the addition of your own comments. Do not feel constrained by any format limitations within the document: if you wish to add further details, please feel free to provide supplementary information by any means of choice. All information will be gratefully received.

Please return your completed survey to the above email address by xxx.
Appendix F: Consultant Survey: e-HR Transformation Projects

<table>
<thead>
<tr>
<th>Your Name</th>
</tr>
</thead>
</table>

Q1. Briefly describe your role and experience in e-HR transformation projects.

A) Would you consider one in particular to be the most underestimated? If so, indicate X.

<table>
<thead>
<tr>
<th>Critical Success Factor</th>
<th>Most Underestimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Resource</td>
<td></td>
</tr>
<tr>
<td>Sufficient funding</td>
<td></td>
</tr>
<tr>
<td>Robust Project Management and Governance</td>
<td></td>
</tr>
<tr>
<td>Effective Change Management</td>
<td></td>
</tr>
<tr>
<td>Senior Management commitment and sponsorship</td>
<td></td>
</tr>
<tr>
<td>Appropriate available data</td>
<td></td>
</tr>
<tr>
<td>Appropriate training/adequate skills transfer</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

B) Please provide details of any others you may consider to be emerging as new CSF’s:

C) Please provide details of any which you may consider to be particular to the Public Sector:
### Q3. The following are typical of the broad objectives and drivers for change included within the business case for e-HR transformation. From your experience, are they generally achieved to a reasonable level from the customer’s perspective?

<table>
<thead>
<tr>
<th>Objective</th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>A need to improve the quality of HR services to the business and, at the same time, reduce overall HR delivery costs.</td>
<td></td>
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<tr>
<td>Provide a system which supports the identification, selection, deployment, development and retention of people to support the needs of the business</td>
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<tr>
<td>Provide a foundation for promoting personal development, growth, career satisfaction and appropriate reward for employees</td>
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<tr>
<td>Enable the elimination of fragmented, redundant and labour-intensive processes traditionally identified with traditional HR functions</td>
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<tr>
<td>Provide the ability to report on and analyse HR and payroll related information (e.g. operational and management reports) from a single source.</td>
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</tr>
</tbody>
</table>

Please provide details of any others or additional comments:

### Q4. With regards to a typical timeline for the project e.g.: estimated start and finish dates for delivery of ALL work defined as "in scope", what is your experience in how realistic they are in general?

Comments:
Q5. Where plans fall behind schedule or certain elements are abandoned, to what degree are any of the following contributory factors?  

<table>
<thead>
<tr>
<th>Contributory Factor</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in business strategy/priorities</td>
<td></td>
<td></td>
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<tr>
<td>Lack of appropriate people participating full time</td>
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<tr>
<td>Lack of project funding (e.g.: budget not provided as per original Business Case)</td>
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<td></td>
<td></td>
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<tr>
<td>Escalation in cost from original Business Case</td>
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<tr>
<td>Lack of project team skills or knowledge of the system</td>
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<tr>
<td>Poor Project Management and governance</td>
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<tr>
<td>Lack of business engagement</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Lack of operational support team skills (for implemented functionality)</td>
<td></td>
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<td></td>
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<tr>
<td>Unrealistic expectations</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Poor process design</td>
<td></td>
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<tr>
<td>Lack of strategic context of growth and expansion</td>
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<tr>
<td>Lack of appropriate data/content</td>
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<tr>
<td>Lack of shared vision</td>
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<tr>
<td>Lack of support from Implementation Partner/consultants</td>
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</tbody>
</table>

Please provide details of any others or additional comments:
Q6. What are the typical Change Management techniques deployed in Public and Private Sector during and beyond the projects? How would you evaluate them and are there any significant differences which might impact on success?

Q7. If/when certain purchased product components remain unused as functionality, what would you consider to be the typical reasons?

Q8. Generally, are post-implementation operational support costs and responsibilities adequately assessed in the Business Case e.g.: resource, maintenance, end-user support etc?
   Comments:

Q9. How successfully does the HR function itself adapt to using the system?

Q10. Where a Post-Implementation or Lessons Learned report is produced, what tend to be the key points documented?

Q11. Finally, do you consider there to be any issues particular to Public Sector as opposed to Private Sector which may impact on the success of e-HR Transformation Projects?

THANK YOU