

# HR Analytics: use and impact in a cloud computing organisational context

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## ABSTRACT

HR analytics is a relatively new and unexplored area which has become increasingly prevalent over the last number of years. Despite this, there is a limited body of research surrounding the area especially regarding its use within organisations. Although it is recognised in the literature that organisations need to engage in HR analytics in order to gain competitive advantage, the literature is restricted when addressing the impact of HR analytics on the HR function and the organisation as a whole.

Subsequently, this research aims to contribute to the limited body of research available in the area. In particular, this research wishes to explore the use of HR analytics and identify the impact, if any, that HR analytics has on both the HR function and the organisation. In order to fulfil this, the author has posed the following research question:

*How are HR analytics used and what impact do they have on a cloud computing organisation?*

The literature depicts how the HR function is undergoing a significant reconceptualisation and transitioning towards a more strategic function, which was initiated by an article published by Ulrich in 1998 entitled “A new mandate for HR”. HR analytics is one way in which HR professionals may make this transition. HR analytics is an extension to e-HRM and assists HR professionals and the executive team in making both operational and long-term core strategic decisions (Bose 2008; Kiron, Ferguson & Prentice 2013). Although the literature addressing the impact of HR analytics is finite, it suggests that HR analytics, if used correctly, may improve the performance of the HR function, improve organisational decision making and create a future focused function (Ingham 2011; CIPD 2013; Sesil 2014).

A single case study approach on one of the world’s largest and most valuable cloud computing organisations, company X, was adopted in order to address the research question and research objectives. The primary research was supported by seven semi-structured interviews with HR professionals and business professionals of the organisation.

The findings from this study indicate that company X are in the early stages of adopting HR analytics and therefore, despite improving, are engaging in HR analytics at a predominantly operational level. The progression of company X to a more strategic adoption is constrained as they have failed to develop or acquire analytical talent. Despite this, their engagement in

HR analytics has already had a very positive impact on both the HR function and the organisation.

## **DEDICATION**

*For Mam and Jim*

## **ACKNOWLEDGEMENTS**

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## **ETHICAL DECLARATION**

I declare that this dissertation is wholly my own work except where I have made explicit reference to the work of others. I have read the Structured Masters' Programmes Research Policy, Procedures, and Guidelines and hereby declare that this dissertation is in line with these requirements. I have discussed, agreed, and complied with whatever confidentiality or anonymity terms of reference were deemed appropriate by those participating in the research and dealt appropriately with any other ethical matters arising.

I have uploaded the entire dissertation as one file to Turnitin® in Moodle®, examined my 'Originality Report' by viewing the detail behind the overall 'Similarity Index', and have addressed any matches that exceed 3%. I have made every effort to minimise my overall 'Similarity Index' score and the number of matches occurring.

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Natalie Power

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Date

***“It is not because things are difficult that we do not dare, it is because we do not dare that they are difficult.”***

Lucius Annaeus Seneca

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***CHAPTER 1***  
***INTRODUCTION***

## Chapter 1

### INTRODUCTION

#### 1.1 Introduction

This chapter offers the reader an introduction to the research topic, HR analytics, which is relatively unexplored. Specifically, the aim of this dissertation is to explore the use and impact of Human Resource analytics in strategic HRM and discover if it impacts organisational outcomes, particularly in a cloud computing organisational context. This chapter outlines the rationale for the study as well as the research objectives, methodology and layout of the dissertation.

#### 1.2 Rationale for the Study

Having completed a module in her undergraduate degree entitled ‘Strategic HRM’, the author came to the realisation that her degree was highly focussed on operational HR. This sparked the author’s interest and enticed her to learn more about the strategic contribution of HR and how it impacts on organisational outcomes. Furthermore, the author read a recent article published by the Chartered Institute of Personnel and Development (CIPD) in the People Management magazine entitled “*We love data*” (2013) detailing the importance and growth of ‘big data’ and HR analytics. This article encouraged the author to learn more about the area and subsequently resulted in the undertaking of this dissertation.

Wright and McMahan (1992) define Strategic Human Resource Management (SHRM) as “*the pattern of planned HR deployments and activities intended to enable an organisation to achieve its goals*” (p.298). Since Ulrich’s article ‘A new mandate for HR’ was published in 1998, it has been questioned whether HR can deliver and make the transition from a traditionally transactional function to become a strategic partner and take its place “*at the top table*” (Barney 1991; Gubman 2004; Wielemaker & Flint 2005; Wang and Shyu 2008; Chao-Ying 2012 p. 262).

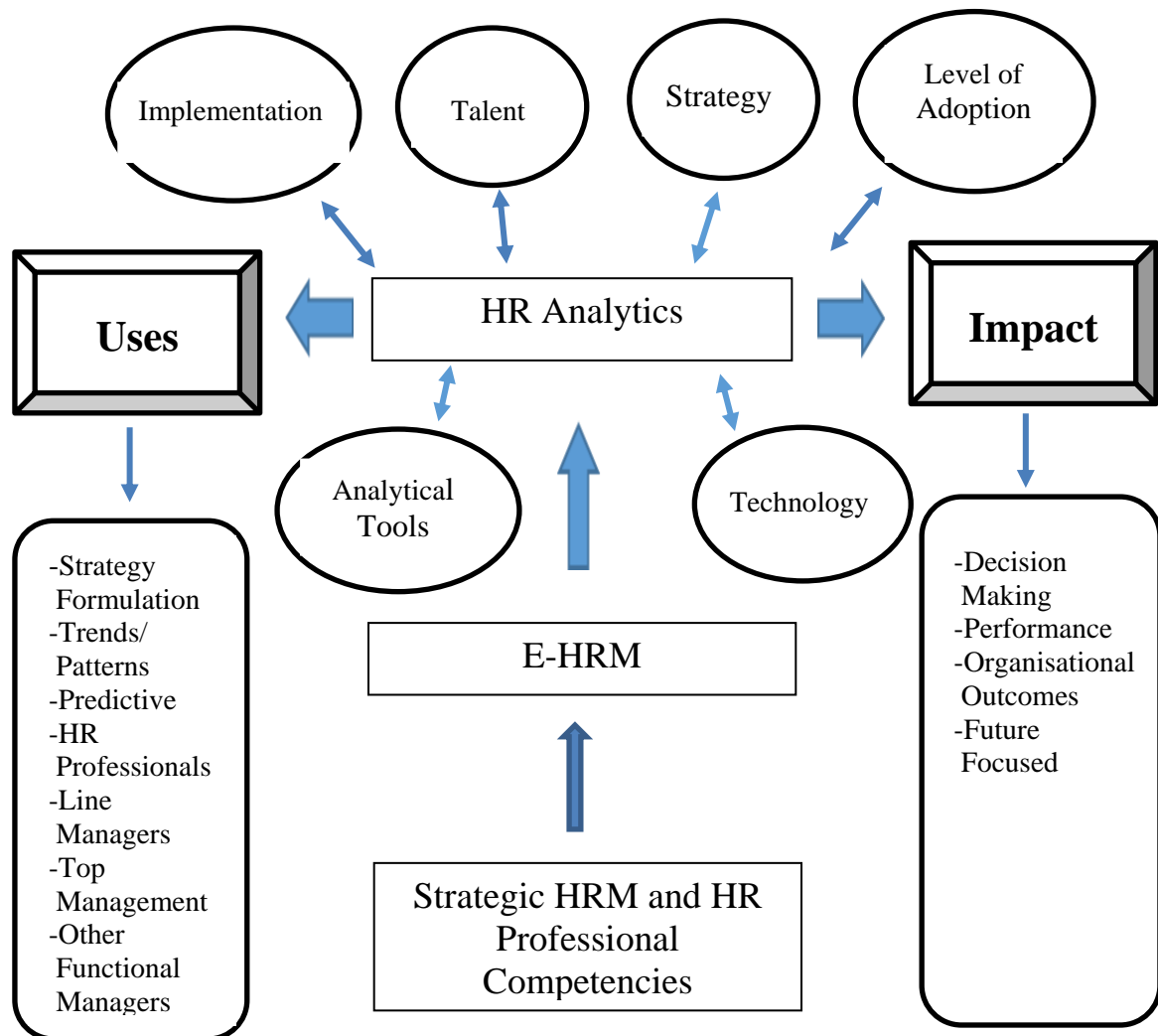
E-HRM has been widely discussed with regard to its ability to leverage HR in achieving its strategic objectives (Wiblen 2010; Martin & Reddington 2010; Chauhan et al. 2011; Kumar & Pandya 2012; Bondarouk & Ruel 2013). Bondarouk and Ruel (2013) describe e-HRM as

*“the integration of all HRM policies and strategies with information technology in a way that creates value, supports, and benefits management and employees”* (p.394). E-HRM supports HR professionals by supplying them with management reports and summaries of data, enabling them to analyse the data and make strategic decisions (Bondarouk & Ruel 2009).

Analytics may be defined as *“the use of data and related business insights developed through applied analytical disciplines such as statistical, quantitative, predictive, cognitive and other models to drive fact-based planning, decisions, execution, management measurement and learning”* (Kiron & Shockley 2011 p.58). The specific focus of this dissertation is HR analytics as it is a relatively new and unexplored area (Kiron, Ferguson & Prentice 2013).

HR analytics has the potential to propel HR into the next generation and provide the platform for HR to make the transition to a strategic function (Fink 2010; CIPD 2013). A conceptual model (figure 1.1) has been created to demonstrate the use and impact of HR analytics as well as to illustrate the links between strategic HRM, e-HRM and HR analytics. The most significant attribute of an analytically-driven HR function is the ability of HR to predict future trends, attitudes and reactions, thus enabling HR professionals to construct accurate plans and budgets (Nenonen & Starbacka 2010; LaValle et al. 2011).

**Figure 1.1: Conceptual Model Linking Strategic HRM, e-HRM, Analytics and HR Analytics**



### 1.3 Research Question

The research question is: ‘how are HR analytics used and what impact do they have on a cloud computing organisation?’

### 1.4 Research Objectives

It is apparent that HR analytics is an emerging area and as a result there is a limited body of research available on this specific topic. Due to the limited body of research available, further research is required on the topic. In an attempt to provide an insight, the following research objectives were chosen:

- i. To identify any links that exist between strategic HRM, e-HRM and HR analytics in a cloud computing organisational context;
- ii. To analyse the extent in which HR analytics are used in a cloud computing organisational context;
- iii. To identify the generators of HR analytics and the users of the data provided from the HR analytics;
- iv. To explore whether HR analytics have any impact on the strategic function of HR and organisational outcomes in a cloud computing organisation.

## **1.5 Methodology**

Secondary data in the form of academic journals, academic articles, professional magazines, corporate publications and professional body publications were revised in order to gain an understanding of the problem and develop the literature review. The literature review provided the basis for the primary research and also directed the research methods chosen.

In order to achieve the research objectives, seven semi-structured interviews took place with HR and business professionals of a cloud computing organisation. The seven participants consisted of a HR Business Partner, HR Generalist, HR Intern, Senior Recruitment Consultant, Graduate Recruitment Consultant, Senior Financial Analyst and the General Office Manager.

## **1.6 Structure of the Study**

### **Chapter 2: Strategic HRM**

Chapter two outlines the challenges facing HR professionals and identifies the competencies which they must possess. It also identifies the current transitioning of HR to a strategic function, ultimately demonstrating the need for HR analytics and how HR analytics may aid and support this transition.

### **Chapter 3: E-HRM**

This chapter defines e-HRM and describes how it supports the operational and strategic activities of the HR function. It then continues to discuss the users of e-HRM and the value it creates for the organisation, subsequently enabling HR to analyse the data generated.



## **Chapter 4: Analytics**

In this chapter the link between SHRM, e-HRM and HR analytics is explored. The chapter outlines the concept of analytics as well as the advantages attached. Furthermore, this chapter focuses on HR analytics and details the benefits, challenges, use and services provided by HR analytics. Lastly, the strategic contribution and organisational impact of HR analytics is discussed.

## **Chapter 5: Methodology**

Chapter five outlines the design of the research, the research approach adopted by the author and the research methods chosen. The chapter also outlines the ethical and confidentiality obligations of the author as well as providing insight into how they ensured the validity and reliability of the dissertation.

## **Chapter 6: Research Findings**

This chapter presents the key findings from the primary research.

## **Chapter 7: Discussion**

Chapter seven identifies the similarities and differences found between the literature and the primary research findings.

## **Chapter 8: Conclusion and Recommendations**

This chapter summarises the most significant findings that arose from the study. The limitations of the dissertation are also detailed as well as recommendations for practice and future research.

## **1.7 Conclusion**

The rationale for the chosen dissertation title was outlined in this chapter as well as the research question, objectives and approach to the primary research. Recent years have seen the emergence of HR analytics which essentially enables HR professionals to go a step further and analyse the data collected. Organisations may project future trends, hence assisting decision making and aiding the strategic transitioning of the HR function. Chapter 2

now moves to the literature review where SHRM and the role of HR professionals is discussed.

***CHAPTER 2***  
***LITERATURE REVIEW***  
***STRATEGIC HRM***

## Chapter 2

### STRATEGIC HRM

#### 2.1 Introduction

This chapter defines SHRM and outlines the reconceptualisation of the HR function as it transitions to a more strategic function. It further discusses the role of HR professionals and the competencies which they must possess in order to deliver and meet organisational expectations. Utilising HR analytics successfully is one way in which organisations may support the strategic transition of the HR function which is evident in the conceptual model outlined in chapter 1 (figure 1.1).

#### 2.2 Strategic HRM

As already outlined in chapter one, Wright and McMahan (1992) define SHRM as *“the pattern of planned HR deployments and activities intended to enable an organisation to achieve its goals”* (p.298). Equally, Choo et al. (2010) describe how *“SHRM involves designing and implementing a set of proactive HR policies/practices that ensure that an organisation’s human capital contributes to the achievement of its corporate objectives”* (p.104). There has been a pronounced emphasis on the need for HR to transition to a strategic function over the last decade (Wielemaker & Flint 2005; Fabi et al. 2009). Throughout the 1990’s the HR profession and the management of the function came under significant scrutiny as many organisations questioned the contribution it made to organisational outcomes and deemed it an extra cost with little added value to the organisation (Wielemaker & Flint 2005; Coda et al. 2009; Pepitone 2009).

In 1998, Ulrich published a journal article entitled “A new mandate for HR” which identified four ways HR could re-invent and legitimise its role, one of which was to become a strategic partner and execute strategies that support organisational competitive advantage (Rees and Johari 2010). In order to operate strategically, Ulrich advised that HR should make the transition from an administrative expert to a strategic business partner by operating at a transformational level rather than at a predominantly transactional level (Lepak & Snell 1999; Sheehan & Cooper 2011; Bondarouk and Ruel 2013). HR analytics, as will be discussed in chapter four, may leverage the strategic transitioning of the HR function (Sesil 2013). Lalwer

and Mohram (2003) describe how ‘true’ strategic HR partners spend their time on HR planning, developing strategies, promoting strategic change and making contributions to organisational design as opposed to completing administrative work and delivering services, and HR analytics has the potential to support this.

By utilising HR analytics, organisations may use their HR information to identify trends and predict results thus improving HR’s ability to plan and make informed decisions about strategy (Feig 2006; Mondore et al. 2011). According to Schuler and Tarique (2007), truly strategic HR functions are involved in strategy formulation and HR analytics improves the information available to the HR function, potentially consolidating its role and enabling HR professionals to impact strategy formulation and better align the organisations workforce to the strategic objectives of the organisation.

### **2.3 The Role of HR Professionals**

In order for the HR function to make a strategic impact, much emphasis has been placed on whether HR professionals have the capability to deliver. HR professionals traditionally have always been involved in implementing organisational strategies but rarely involved in formulating them (Antila & Kakkonen 2008). The current emphasis placed on HR professionals is their involvement in the formulation and implementation of organisational strategies rather than merely supporting the organisational strategy (Mothersell et al. 2008; Labedz & Lee 2011). The CIPD HR Profession Map (2013) outlines ten activities that ‘truly strategic’ HR professionals need to be engaging in including: organisation design; organisation development; resourcing and talent planning; learning and development; performance and reward; employee engagement; employee relations; service delivery and information; leading and managing the HR function, and; strategy insights and solutions. Furthermore, the HR competency study (HRCS) carried out in 2012 by Ulrich et al. identified six fundamental competencies which HR professionals must actively possess in order to influence organisational outcomes (see figure 2.1). HR analytics, if used correctly, may leverage HR professionals in fulfilling their role of technology proponent and HR innovator and integrator.

It may be concluded that the expectations of HR professionals has undergone a significant reconceptualisation and that HR professionals are now required to play a more strategic role (Mothersell et al. 2008). By developing their analytical capabilities and talent, HR

professionals may utilise the data available to them more effectively, enabling them to identify trends and predict future trends, thus affording HR professionals with the information to make strategic decisions and the opportunity to maximise their competency ca l.

20

**Figure 2.1: The 2012 HR Competency Model**



Source: Ulrich, D., Younger, J., Brockbank, W. & Ulrich, U. 2012, 'HR talent and the new HR competencies', *Strategic HR Review*, Vol. 11, No. 4, p.218.

## 2.4 Conclusion

This chapter has addressed the reconceptualisation of HR within organisations and its movement towards a more strategic function. The competencies necessary for HR professionals to deliver at a strategic level were also identified. HR analytics has the potential to identify trends and predict future trends, consequently presenting the HR function with the opportunity to improve and maximise their strategic contribution and demonstrate the competencies of technology proponent, HR innovator and integrator, and strategic positioner. Chapter 3 now discusses the role technology may play in supporting the strategic transition of the HR function and also explores how technology may support HR analytics.



***CHAPTER 3***  
***LITERATURE REVIEW***  
***E-HRM***



## Chapter 3

### E-HRM

#### 3.1 Introduction

This chapter explains the term e-HRM, discusses its use, illustrates the technology's strategic capability and outlines the potential it may have to create value. Furthermore, this chapter intends to illustrate how e-HRM is essential in order for HR professionals to successfully engage in HR analytics. E-HRM is the technology that allows HR to collect and collate HR data, subsequently supporting the use of HR analytics as seen in the conceptual model in chapter one (figure 1.1). HR analytics, its uses and impact are further discussed in chapter four.

#### 3.2 E-HRM

E-HRM is defined as the *“application of internet, web-based technologies, social media technologies and mobile technologies to change interactions between HR, line managers and employers from a pure face-to-face relationship to a technology mediated one”* (Martin & Reddington 2010 p. 1554). Bondarouk and Ruel (2013) further describe e-HRM as *“the integration of all HRM policies and strategies with information technology in a way that creates value, supports, and benefits management and employees”* (p.394). E-HRM enables HR staff to better serve employees, line managers, functional managers and top management needs by automating routine HR tasks and improving the responsiveness to employees and management queries, subsequently facilitating HR professionals with more time to focus on collating, analysing and interpreting the information available to assist in strategic decision-making (Shilpa & Gopal 2011).

E-HRM enables HR professionals to analyse the information collected and supports both tactical and strategic decision-making (Kapoor & Sherif 2012). Traditionally, IT was used by the HR function in order to facilitate administrative duties (Bondarouk & Ruel 2009; Shilpa & Gopal 2011). A survey carried out by CedarCrestone (2006) identified the changing role of IT in an attempt to support HR in its strategic transformational activities such as talent acquisition services (61%), performance management (52%) and compensation management (49%). E-HRM is now being recognised for its more strategic capabilities and its ability to

leverage HR analytics to aid the transition of the HR function in becoming a strategic partner (Foster 2010; Bondarouk & Ruel 2013).

### **3.3 Stakeholders/Users of e-HRM Data**

E-HRM supports HR professionals by providing them with management reports and summaries of data, affording them with the opportunity to engage in HR analytics and enabling them to make strategic decisions (Bondarouk & Ruel 2009). As alluded to earlier, e-HRM allows HR to interpret HR data, thus providing data that enhances better decision-making of top management, other management functions, line managers, HR managers and employees (Kovach & Cathcart 1999; Kumar & Pandya 2012). The data and reports generated from e-HRM provides the platform for HR analytics to take place (Bose 2008).

Employees may benefit from e-HRM as tools such as Interactive Voice Response (IVR) and Employee/Manager Self-Service may improve response time, efficiency and create a higher level of customer intimacy (Bondarouk & Ruel 2009; Martin & Reddington 2010). In addition to the potential outcomes gained by employees, e-HRM supports all management of the organisation in a number of ways by enabling organisations to better understand their internal capabilities and manage their talent more efficiently. An example of this is how e-HRM may improve the quality of the recruitment process through tools such as optical character recognition (OCR), which identifies key words in potential applicant's applications and sorts them based on their relevance to the requirements of the job (Dickson & Nusair 2010). The use of e-HRM to support HR practices such as these ultimately impacts all functions of the organisation and improves the bottom line by minimising turnover and maximising productivity (Srivastava 2010). Other HR practices e-HRM may support include performance management, career development and compensation and benefits (Kassim et al. 2012).

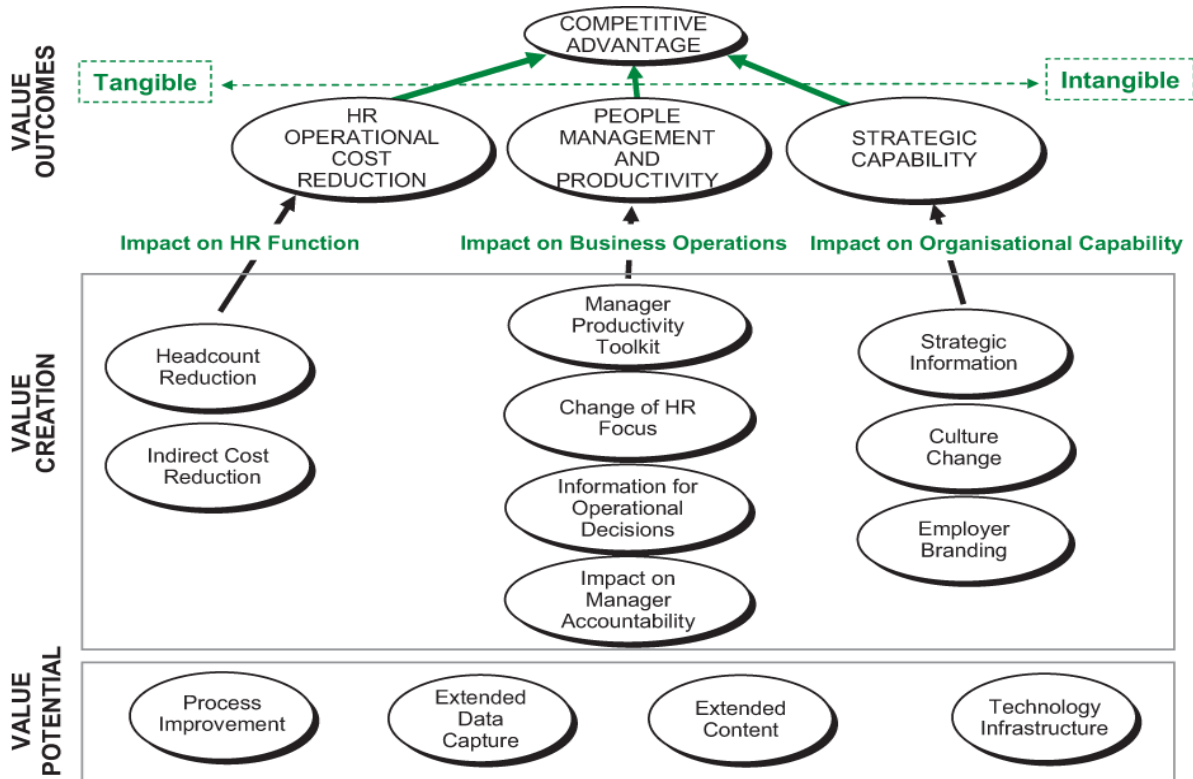
### **3.4 E-HRM and Value Creation**

HR professionals may provide value to the organisation and improve their own accountability through the implementation of effective e-HRM systems (Martin & Reddington 2010; Bondarouk & Ruel 2013). According to Haines (2008) and Parry (2011), e-HRM improves the functionality and services offered by the HR function, thus alleviating HR professionals of some of their transactional tasks, ultimately supporting the transition of the HR function to

becoming a more strategic function. By assisting HR in their strategic transition, e-HRM may reduce the costs of the HR function through improved efficiencies and also provide the opportunity for organisations to successfully engage in HR analytics. Consequently, HR may better support organisational decision making and the organisations stakeholders (employees, line managers, functional managers, top management team). Therefore it is suggested by the literature that e-HRM may create value for organisations (Parry 2011; Kassim et al. 2012).

A similar view of value creation is proposed by Foster (2010) who constructed the E-HRM Value Model as outlined in figure 3.1, which suggests that value may be created through e-HRM in three ways: HR operation cost reduction; people management and productivity, and, strategic capability. Foster (2010) argues that e-HRM reduces the costs of the HR function as less people are required to complete administrative tasks. Subsequently, HR professionals may be provided with the opportunity to participate in more strategic activities and focus on increasing the strategic capabilities of the HR function which may include further utilising the information available and engaging in HR analytics (Royal & O' Donnell 2008; Mondore et al. 2011; Parry 2011; Kumar & Pandya 2012).

### 3:1: E-HRM Value Model



Source: Foster, S. (2010), Creating HR value through technology, *Strategic Direction*, Vol. 26, No. 8, p. 4.

### 3.5 Conclusion

This chapter sought to define e-HRM, identify the key users of e-HRM data and explore the potential value created from the use of e-HRM. E-HRM has potential to automate and alleviate HR professionals from a number of routine HR tasks, affording them with the opportunity to potentially focus their attention on the transitioning of the HR function to a more strategic function and demonstrate how the function creates value. A vast amount of data may be collected, collated and captured by the e-HRM system, thus affording HR professionals with the opportunity to analyse this data to determine existing trends and predict future trends, leveraging the potential of HR analytics. As made evident throughout this chapter, e-HRM is a prerequisite for HR analytics. Chapter four now turns focus to the use and impact of HR analytics.

## ***CHAPTER 4***

### ***LITERATURE REVIEW***

#### ***DATA ANALYTICS AND HR ANALYTICS***

## Chapter 4

### DATA ANALYTICS AND HR ANALYTICS

#### 4.1 Introduction

This chapter describes how organisational functions, such as HR, are utilising the vast amount of data available to them to engage in data analytics that support both tactical and organisational decision making. Chapter three has served to demonstrate how e-HRM is the engine that enables HR professionals to engage in HR analytics effectively. This chapter explores the use of HR analytics to provide the HR function with accurate and predictive data which may be used to formulate organisational and HR strategies. As an increasing number of organisational HR functions are engaging in HR analytics, the key users of HR analytics, as well as the considerations for building organisational HR analytical capabilities must be considered. Finally, this chapter examines the impact of HR analytics on the HR function, the HR professionals themselves and on organisational outcomes (figure 1.1).

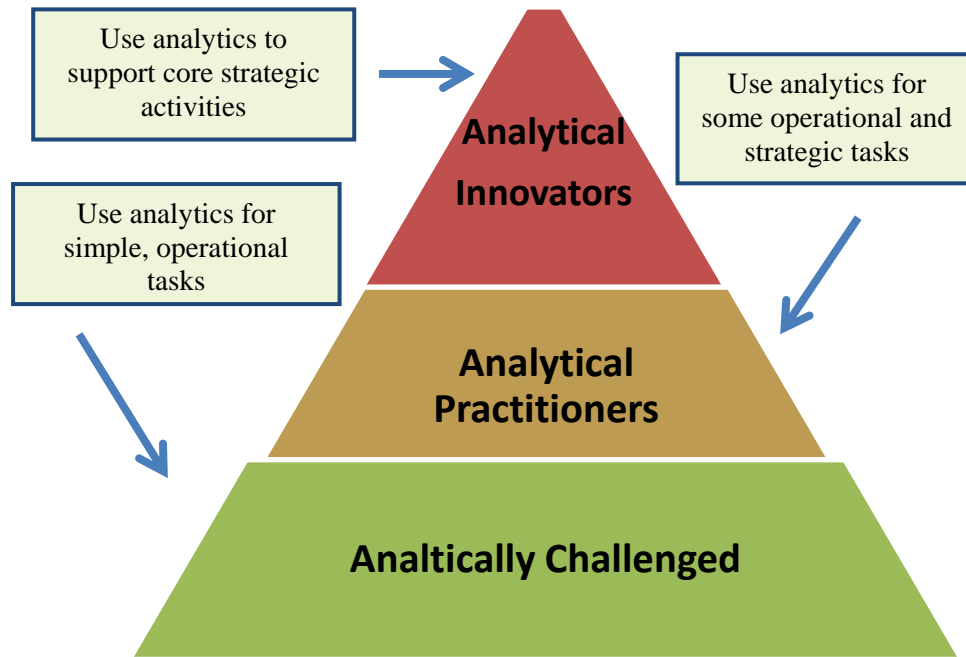
#### 4.2 Analytics

Analytics can be defined as *“the use of data and related business insights developed through applied analytical disciplines such as statistical, quantitative, predictive, cognitive and other models to drive fact-based planning, decisions, execution, management measurement and learning”* (Kiron & Shockley 2011 p.58). Data analytics goes beyond traditional data collection and assists organisations in making not only operational decisions but going one step further, analytics assists the executive team in making fundamental, long-term and core strategic decisions (Bose 2008; Kiron, Ferguson & Prentice 2013). The use of data analytics to support and improve decision making is equally applicable to the different functional areas such as HR, thus giving rise to the emergence of HR analytics (CIPD 2013). A global study (2013) conducted by MIT Sloan and SAS on senior executives at Fortune 500 companies found that 85% of these organisations were using data analytics. Furthermore, the survey found that organisations who exploit their digital capabilities such as analytics are 26% more profitable than their competitors and perform between 6-9% above the industry average (Kiron, Ferguson & Prentice 2013). The wide use of data analytics amongst world leading organisations emphasises the high regard held for data analytics and the results outlined

above demonstrate that it is a very worthwhile activity with many benefits which are discussed in section 4.5 (Boucher Ferguson 2013).

### 4.3 Organisational Adoption of Data Analytics

**Figure 4.1: Three Levels of Organisational Data Analytics Adoption**



Source: Kiron, D., Ferguson, R. B. and Prentice, P. K. (2012), 'From value to vision: Reimagining the possible with data analytics', *MIT Sloan Management Review*, Spring 2013, pp. 1-19.

As seen in figure 4.1, organisations may adopt data analytics at three levels; the analytical innovator; the analytics practitioner and; the analytically challenged. The analytical innovators are those organisations that have fully embraced the power of analytics across a number of organisational functions and use analytics to support core strategic activities (Kiron, Ferguson & Prentice 2012). Contrastingly, analytically challenged organisations have failed to utilise their technology potential and only use analytics for simple, operational reporting. Organisations that fall in the middle ground are known as the analytical practitioners. These organisations recognise the capability of analytics and use it daily at a routine level. Despite this, they still have not maximised the strategic potential which analytics may have on an organisations future as outlined previously in the MIT global survey. A survey carried out on 4,500 executives, managers and analysts in 120 countries

identified that the majority of organisations fall under the analytical practitioners category (Kiron et al. 2011).

#### **4.4 Drivers of Data Analytics**

The environment in which organisations operate has undoubtedly been transformed by the “*sheer volume, speed and availability of data...*” (p.2) and the key to gaining and sustaining the competitive edge is managing the data effectively and utilising it to improve performance (CIPD 2013). HR analytics enables organisations to gain competitive advantage by equipping the HR function with the ability to process and analyse the complex data collected in order to assist in decision making (Azvine, Cui & Nauck 2005; Affedldt & Silva 2013). Furthermore, research carried out by the Center for Advanced Human Resources Studies at Cornell University (2010) on over 50 participants, found that organisations primarily engage in HR analytics in order to benefit from its potential ability to predict workforce trends, curtail risks, improve performance and maximise returns. Moreover, organisations engage in HR analytics to afford management with more precise and accurate data resulting in enhanced decision making and ultimately improved organisational performance (Kavanagh et al. 2011).

##### **4.4.1 Drivers of HR Analytics**

In terms of HR, analytics provide the opportunity for the HR function to analyse the information available to them, and use predictive modelling to forecast trends. This may result in an improvement in the policies and practices of the function, ultimately equipping the organisation with a core competency and creating a sustainable competitive advantage (Davenport et al. 2010; Bassi 2011). HR analytics are further discussed in section 4.6.

#### **4.5 Organisational Benefits of Analytics**

Organisations that utilise and maximise analytics may reap many advantages. Managers are presented with the opportunity to have a ‘360 degree’ view of all organisational functions, thus enabling them to make optimal and effective decisions at a tactical, operational and strategic level (Feig 2006; Bose 2008). Another, and possibly the most significant advantage of data analytics, is the ability of organisations to anticipate and predict future trends and patterns. This makes these organisations more agile and responsive and further aids managerial decision making by providing them with accurate, future-focused predictions



(Feig 2006; Stine 2010). Finally, another significant benefit of the use of data analytics is that organisations may competently, quickly and confidently make ‘real time’ decisions (Stine 2010).

#### **4.5.1 Benefits of Data Analytics to the HR Function**

As will be outlined in more detail in section 4.8, by extending the use of data analytics to the HR function, HR may be provided with trends and patterns enabling them to improve and maximise individual and organisational performance. In addition, HR may be able to distinguish between the low value-adding areas in which they should reduce the money, time and effort spent, and the areas that have the highest impact on organisational outcomes (Boudreau & Ramstad 2007; Bassi 2011).

#### **4.6 HR Analytics**

In section 4.2, a definition of data analytics was presented. In relation to HR Analytics, Bassi (2011) defines HR analytics as *“the application of a methodology and integrated process for improving the quality of people-related-decisions for the purpose of improving individual and/or organisational performance”* (p.16). Furthermore, Mondore et al. (2011) describe HR analytics as *“demonstrating the direct impact of people data on important business outcomes”* (p.21).

As stated in chapter 3, e-HRM is the driving force behind HR analytics. E-HRM affords organisations with the technology to store, synthesise and provide HR data to the HR function in a useable and timely format (Weeks 2013). HR analytics goes a step further than the routine HR data captured by e-HRM, as HR analytics have the capacity to distinguish between critical, important measures, and routine, operational measures (Levenson 2005). HR analytics aim to utilise powerful technologies with the objective of improving decision making at a tactical and strategic level (Zeljko 2006; Kapoor and Sherif 2012). HR analytics gathers, transforms and manages HR information and reports. It is then concerned with analysing this information using advanced analysis tools such as predictive modelling, statistics, mathematical algorithms and the stochastic process in order to develop and distribute the results to decision makers and key stakeholders (Philpott 2010; Kiron et al. 2011). Therefore, HR analytics assist HR professionals in their quest to transition from an operational role to a true strategic partner by providing them with accurate, concise and

predictive information which may be used to formulate organisational and HR strategies (Royal & O'Donnell 2008; Kapoor & Sherif 2012).

However, often the data captured is disjointed and currently HR may not be maximising the potential of the data available to assist decision making and create value (Kiron, Ferguson & Prentice 2013). HR analytics presents HR professionals with the opportunity to identify significant, tacit information and predict insights that may occur in the future. For example, rather than just generating turnover figures, analytics enables HR users to determine trends by level, position, demographic variables and predict future trends and turnover levels (Ingham 2011). The key to success embeds itself in the managers and other user's capability to read, understand and take action on the data received (Royal and O'Donnell 2008). Sullivan (2013) suggests that Google represent the world's only completely data-driven HR function. They calculate the value of top performers and convince senior management of the importance of recruiting and retaining exceptional talent by computing the performance differential between exceptional employees and average employees which can be as much as 300 times greater.

#### **4.7 HR Analytics Software and Services**

There are three approaches to HR analytics which organisations may adopt. These include packaged analytics; which focus on a particular function and do not support all organisational decision making; application development platforms, which are more personally adapted and offer tools that speed up the application of development process, and finally; customised applications, which are the most time consuming but return the most creative solutions (Bose 2008).

Many of the big vendors offer HR analytical software to organisations. SAP 'Enterprise Resource Planning Workforce Analytics' and SAS 'Human Capital Predictive Analytics and Retention Modelling' are the most commonly used (Kapoor 2010; Sesil 2014). SAP's application includes software such as workforce planning, work cost planning and simulation, talent management analytics and workforce benchmarking (SAP 2013). Similarly, SAS software offers features such as predicted turnover percentage, organisation exposure, high risk job category and top performers (SAS 2013). According to Gartner (2010), in 2009, HR analytical software accounted for US\$1.4billion of analytical software revenue. These multifaceted analytical softwares enable HR to make predictions and decisive strategic

decisions as previously alluded to, such as *“in what ways human capital investments will contribute to business performance”* and *“what skills and opportunities lie ahead?”* (Kapoor & Sherif 2012).

## **4.8 Potential Organisational Impact of HR Analytics**

### **4.8.1 Improved Performance**

In an attempt to legitimise, demonstrate value and aid the transition of the HR function to a more strategic function, many HR professionals as seen in figure 1.1, are using HR analytics to improve the function's performance as well as to measure the impact it has on organisational outcomes and the support it lends to other organisational functions (Ingham 2011). Deutsche Telekom describe how they improved the efficiency of their HR function through investing in HR analytics. The analytics applied, found that their talent was not being managed effectively as many managers were 'hoarding' the good talent in their departments, subsequently they switched to a supply chain approach to successfully deploy their talent more effectively (Grossberg 2012). Similarly, Bon Ton used HR analytics to identify what makes sales representatives successful in their role and subsequently increased the number of sales per representative by \$1,400 and reduced turnover by 25% (Gardner et al. 2011).

### **4.8.2 Improved Decision Making**

The HR function is undergoing a reconceptualisation and following suit of other organisational functions by using data analytics to aid managerial decision making (Boudreau 2010). Through the use of HR analytics, HR professionals have made the move to incorporate decision science into their daily activities and by using these analytical tools emphasis has been placed on the financial benefits of employees' contribution (Boudreau & Ramstad 2007). By engaging in and utilising HR analytics, which gives them accurate and concise reports and predictions, HR professionals are more capable of transforming challenges into opportunities. HR now have the ability to covert numbers and data into intelligence (Kapoor & Sherif 2012). The function is more ready to interpret and predict, eliminating uncertainty and improving decision making at an operational but also at a more fundamental, critical, strategic level (LaValle et al. 2011; Sesil 2014).

### **4.8.3 Future Focused Function**

HR analytics, if utilised successfully, may generate value in the early stages. HR analytics may create value by providing solutions to HR problems such as underperformance, weak talent pool, poor compensation packages and low employee engagement, hence encouraging long term change both, strategically and culturally (Nenonen & Starbacka 2010; LaValle et al. 2011). Through the adoption of advanced HR analytical tools such as statistics, algorithms and predictive modelling, the HR function may transition from its traditional ‘rear-view’ analysis to become a future focused strategic function predicting trends and patterns, and concentrating on customers, resources and employees. Ultimately, HR functions who effectively engage in HR analytics have the ability to make decisive, strategic decisions in ‘real time’ (Bose 2009). HR analytics permits HR professionals to predict future HR needs, capabilities and trends, assisting in human resource budgeting, reporting and planning (CIPD 2013).

### **4.8.4 Competing Requirements from HR Analytics**

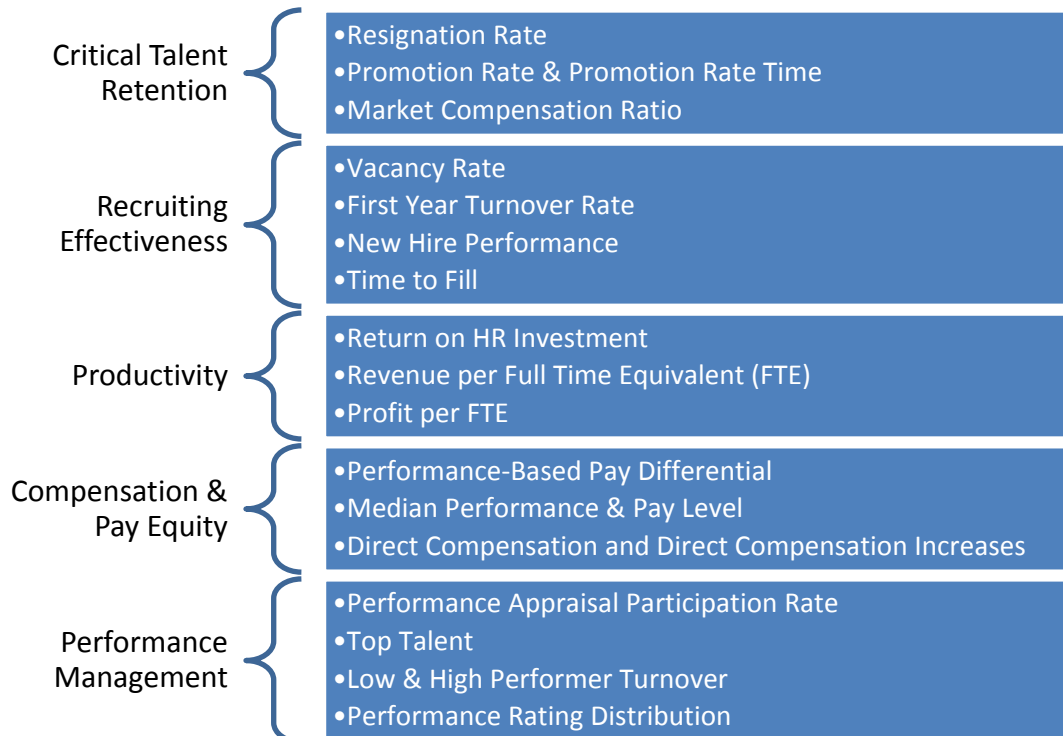
Often HR professionals, line managers, senior management and other functional managers have competing requirements regarding the impact of HR analytics and the outcomes it creates. Davenport et al. (2010) suggests that over-emphasis has been placed by senior managers and other functional managers on the return-on-investment (ROI) and the organisational financial returns as a result of utilising HR analytics. Despite this, the ultimate goal of HR analytics is to validate the strategic contribution of the HR function and demonstrate how the function creates value by maximising individual and organisational performance (Bassi 2011).

## **4.9 Measuring the Impact of HR Analytics**

According to Mondore et al. (2011), the impact of HR activities on organisational outcomes may be evaluated considering three metrics, namely: efficiency; effectiveness and impact. Most HR functions effectively generate HR data that demonstrates the efficiencies created by the function, however many fail to validate the effectiveness and impact of the function on decision making, organisational outcomes and the bottom line (Center for Effective Organisations 2004). By engaging in HR analytics, HR functions may demonstrate how their policies and practices impact organisational performance and also demonstrate how HR analytics may support the development of organisational competencies and capabilities (Fitz-Enz 2010). Surveys carried out by Visier (2012) on 38 Fortune 500 organisations found that

only 34% of organisations who participate in HR analytics measure the organisational impact of HR activities and reports. Despite this, 65% of organisations consider measuring the organisational impact of these activities essential and assert that they intend on measuring the impact in the future (Gardner et al. 2011). Additionally, research carried out by the HR Marketer Services Group (2012) on 150 US organisations found that the most important HR analytics to indicate organisational performance are: turnover (68%); employee performance (65%); compensation (57%); productivity (54%) and competencies (51%). Similarly, a survey carried out by Visier (2012) outlined that organisations who use HR analytics to measure performance in five key areas are more likely to improve organisational productivity and profitability (figure 4.2). Comparably, Google used their HR analytics to conduct an internal study to determine whether good managers actually impact performance. From this survey, they identified eight competencies that impact the success of a manager within the organisations culture and incorporated these behaviours into management training and coaching programs (Gardner et al. 2011).

**Figure 4.2: Five key Areas in which HR Analytics should be used to Measure Performance**



Visier (2012), 'From HR metrics to workforce analytics', Visier, Vancouver: USA.

#### 4.10 HR Analytics Challenges

Despite generating multiple benefits and potentially improving organisational performance, the implementation of HR analytics is not without its challenges. It is imperative that the data input into the e-HRM system is correct, as otherwise the analytics generated will be disjointed and inaccurate, undermining the aforementioned potential impact of HR analytics (Kassim et al. 2012). In addition to this, some HR data is non-quantitative and the e-HRM system may find it challenging to analyse this non-quantitative data and struggle to utilise it to assist in the formulation of organisational strategy (Klepik 2004).

#### **4.11 HR Professionals Engagement in HR Analytics**

The CIPD (2013) note that HR professionals are often reluctant to work with numbers and are regularly apprehensive about them (CIPD 2013). Their reluctance is well grounded as they generally lack the relevant IT and financial capabilities to innovate in HR analytics (Bassi 2011; Sesil 2014). This may impede HR's transition to a strategic HR partner as the responsibility for HR analytics may alternatively be held by the IT and finance functions, thus reducing the credibility of the HR function (Davenport, Harris & Shapiro 2010). In order for HR professionals to deliver their analytical promise, they must undergo training to ensure that they have the relevant competencies to both apply the analytical tools and understand the results produced.

HR professionals must further re-evaluate their competencies as it is imperative that they have a knowledge of social science and behaviour modelling in order to understand the complexity of employee behaviours, attitudes, motivators, incentives and team kinetics (Levenson 2005 & Bassi 2011). The HR function also needs to ensure that they have the relevant analytical talent to maximise the potential of analytics which is further discussed in section 4.12. Bose (2008) describes other challenges facing HR professionals who are utilising analytics. Some of these include: obtaining organisational buy-in; form of output; data protection and the rate of change of technology.

Research by the CIPD (2013) shows that although HR is transitioning to a more strategic and data-oriented function, the degree in which HR professionals actively participate in making complex, data-based decisions has been minimal with only 20% of non-HR professional counterparts believing that HR professionals use analytical data to make decisions. However,

research also shows that the adoption of analytics by HR professionals is increasing and is expected to grow significantly over the coming years (Harris et al. 2010; Ingham 2011).

#### **4.12 Building Analytical Talent and Capabilities**

An organisations analytical capability is increasingly becoming a top agenda item for senior management as they are beginning to recognise that HR analytics are a source of sustainable competitive advantage and need to be developed and invested in (Davenport & Harris 2007). As already outlined in section 4.11, in order for the HR function to exploit their analytical capabilities, they must ensure that they have the expertise to carry out the statistics and analytics (Acebo et al. 2012). An analyst may be defined as someone who *uses “statistics, rigorous quantitative or qualitative analysis, and information modelling techniques to shape and make business decisions”* (Harris, Craig & Egan 2010 p.15). Organisations who are analytical innovators, such as Google, will source specific analytical expertise to assist the HR function (Sesil 2014).

##### **4.12.1 Sourcing Analytical Talent**

Levenson (2005) describes how an organisation may source their analytical expertise either through developing their internal staff via a recommended centre of expertise or the sourcing of an external expert who has a deep knowledge about analytics specific to a given function, namely HR. This correlates strongly with Ulrich’s 2012 model whereby he asserts that effective HR professionals must operate as capability builders (Kneebone & Brown 2012).

Professionals who are experts in advanced and predictive analytics are in short supply and so organisations are competing in the ‘war for talent’ (Acebo et al. 2012). The level of analytics required by the organisation determines the level of talent which they need to attract. In the area of HR, a significant gap exists, particularly in the field of advanced analytical experts (Levenson 2011). HR need to carefully manage their analytical capabilities in order to support the achievement of a competitive advantage (Lawler, Levenson & Boudreau 2004; Bondarouk & Ruel 2013).

Successful analytical talent should be adaptive, have knowledge of psychology, possess excellent statistical skills and have heightened business acumen (Boudreau & Ramstad 2004; Levenson 2005; Kneebone & Brown 2012). Harris et al. (2010) discusses how organisations who are considered to be HR analytical innovators, as referred to in section 4.3, must have four types of analytical talent. These are; champions, who are the senior executives and users

of the information; professionals, who possess the quantitative skills; semi-professionals, who have responsibility for applying the models and, finally; amateurs, who do not necessarily conduct the analysis but understand and interpret the outputs. Davenport and Harris (2007) assert that it is more important than ever that organisations attract, engage and retain top analytical talent.

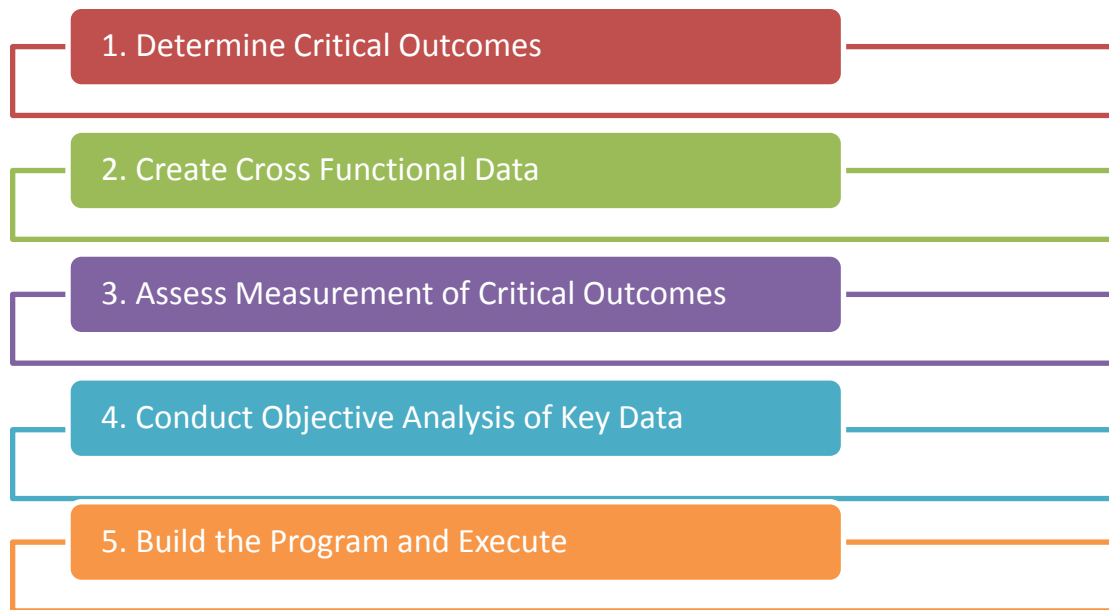
#### **4.13 Successful Implementation of HR Analytics**

According to Kapoor & Sheriff (2012), organisations must ensure that they have the technology and an efficient e-HRM system in place in order to effectively implement HR analytics. Effective HR analytical software must be in place to determine and collate the complex data. According to Corden (2004), on average, organisations receive a 431% ROI on their analytics software and solutions over a three year period. Successful new analytics initiatives should be focused on key organisational objectives and be actively supported by senior management (CIPD 2013). In order for HR analytics to be successfully introduced, it must be evidence-based. Analytics provide an opportunity for the HR function to validate itself and therefore, it is integral that the analytics are focused on key organisational objectives and projects in the initial stages, thus affording the HR function the opportunity to demonstrate their effectiveness (Ingham 2011).

It is important that HR professionals focus not only on the strategic benefits of HR analytics but also place emphasis on the tactical elements. The analytics must involve continuous, widespread communication in order for the work to be fully integrated and understood (Bersin 2013). Mondore et al. (2011) outline a five stage approach to the successful implementation of HR analytics as outlined in figure 4.3. Finally, according to Kiron, Ferguson and Prentice (2012), organisations who successfully implement HR analytics should not get complacent and must at all times continuously revise their analytical capability, competencies and approach.



**Figure 4.3: Steps to Successful Implementation of HR Analytics**



Source: Mondore, S., Douthitt, S. and Carson, M. (2011), 'Maximising the impact and effectiveness of HR analytics to drive business outcomes', *People and Strategy*, Vol. 34, No. 2, p.23.

#### **4.14 Conclusion**

This chapter has sought to address the facets of HR analytics and their use in an organisational context, subsequently detailing how e-HRM, strategic HRM and HR analytics are inextricably linked. The drivers, benefits and challenges associated with the use of HR analytics has been detailed. In addition to this, HR professional's engagement in HR analytics has been discussed as well as the organisational impact as a result of using HR analytics. Chapter five will detail the research methodology to the reader.



***CHAPTER 5***  
***RESEARCH METHODOLOGY***

## Chapter 5

### RESEARCH METHODOLOGY

#### 5.1 Introduction

The purpose of this chapter is to identify both the research question and the research objectives. There were a number of research methods available to the author, however, not all research methods satisfied the data collection requirements for this dissertation. Therefore, this chapter outlines the methodological pathway chosen in the social science context and details the research and data collection methods used, as well as the data analysis and ethical implications for the author in conducting the research.

#### 5.2 Research Question

The research question is a statement which reflects the primary purpose of the research being undertaken (Thomas & Hodges 2010). Malhotra et al. (2006) describes how the research question provides “*the basis for thinking about the context of the research that will be needed and the general nature of the information required*” (p.44). As a result, the research question is the most significant element of the research process as it provides direction and focus to the dissertation (Polonsky & Waller 2005). The research question for the purpose of this dissertation is ‘how are HR analytics used and what impact do they have on a cloud computing organisation?’.

#### 5.3 Research Objectives

Research objectives are concerned with redefining and narrowing the research question into specific research objectives (Robson 2002; Cooper & Schindler 2010; Jonker & Pennink 2010; Polonsky & Waller 2011). Hair et al. (2011) assert that there is a strong correlation between well-defined research objectives and a quality research project. Consequently, it is imperative that the research objectives are focused and well-defined as the research is designed based on these objectives (Collis and Hussey 2009). Hence, the following research objectives have been determined by the author for the purpose of this dissertation:

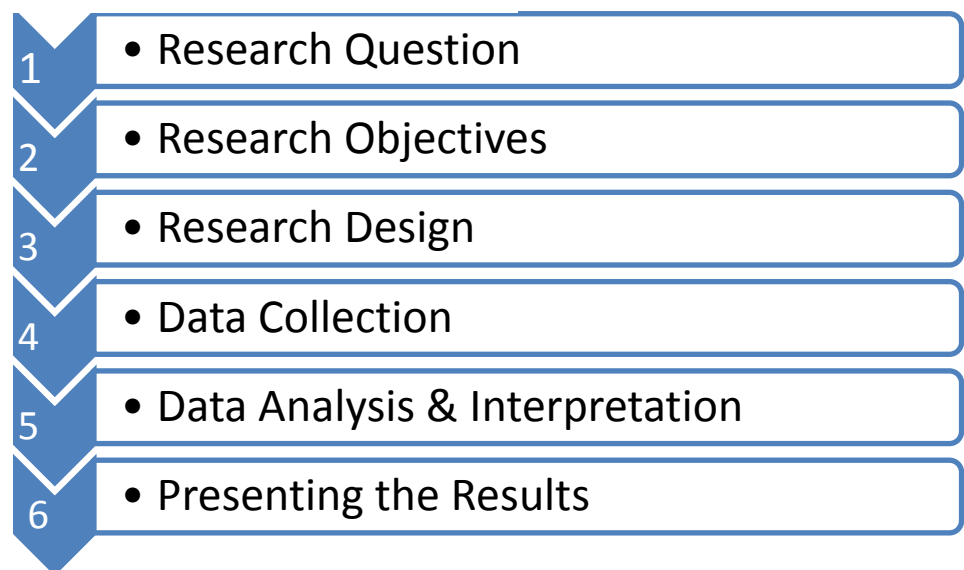
- i. To identify any links that exist between strategic HRM, e-HRM and HR analytics in a cloud computing organisational context;

- ii. To analyse the extent in which HR analytics are used in a cloud computing organisational context;
- iii. To identify the generators of HR analytics and the users of the data provided from the HR analytics;
- iv. To explore whether HR analytics have any impact on the strategic function of HR and organisational outcomes in a cloud computing organisation.

## 5.4 Research Design

The research design is a process with multiple stages that must be abided by in order to successfully complete a dissertation (Saunders et al. 2009). Polonsky & Waller (2011) identify a six stage approach to research design, as outlined in figure 5.1, which was followed by the author for this dissertation.

**Figure 5.1: Six Stage Approach to Research Design**



Source: Polonsky, M. J. and Waller, D. S. (2011), *Designing and Managing a Research Project*, 2<sup>nd</sup> Ed., SAGE Publications Inc., CA: USA.

### 5.4.1 Exploratory Research Study

Research may be separated into two categories. Exploratory studies are utilised when limited research has been completed in the chosen research area or when more information is required in the area in order to develop a feasible theoretical framework (Sekaran & Bougie 2010; Harvard 2014). An exploratory study is a flexible research approach which aims to increase understanding through observation and interviews (Robson 2002).

### **5.4.2 Descriptive Research Study**

Contrastingly, a descriptive study is completed when a substantial body of research exists in the chosen area which enables the author to determine an appropriate area of focus and decide on what data to collect (Robson 2002; Cooper and Schindler 2010; Sekaran & Bougie 2010). Descriptive studies ultimately aim to provide an accurate account of a specific phenomenon, event or situation (Harvard 2014).

Due to the limited body of research available to the author, an exploratory study was used for the purpose of this dissertation, which aimed to fulfil the objectives necessary to provide a conclusion to the research question ‘how are HR analytics used and what impact do they have on a cloud computing organisation?’.

## **5.5 The Case Study Approach**

Yin (2014) describes how “*a case study investigates a contemporary phenomenon in its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident*” (p. 2). Case studies are an in-depth method of data collection commonly used by researchers when they need to explore a specific problem or experience in great detail and in a situation where there are a number of cases available, hence an abundance of information is on hand (Hamel et al. 1993; Creswell 1998). Case studies have a number of characteristics, some of which include:

- Exploring a current phenomenon within its routine real-life context;
- Usually taking place in a single organisation but considering many variables;
- Theory is explored prior to the data collection in order to guide the data being collected (Fisher 2007).

Having taking these characteristics into consideration, the author decided that a case study approach would be the most appropriate method to satisfy the research question. The author explored the literature around HR analytics and decided that the single case study approach enabled them to gain a more comprehensive understanding of the use and impact of HR analytics in its real-life context in a cloud computing organisation.

### **5.5.1 Types of Case Studies**

Yin (2009) describes how a case study is a research strategy that incorporates the design of the study and method of data collection as well as the detailed approaches to data collection.

Case studies, if constructed well, may offer the researcher the opportunity to challenge existing theory and provide a new hypothesis which is the intention of the author for the purpose of this research (Saunders et al. 2009). There are two types of case studies. General conclusion case studies aim to generate general conclusions from a specific number of cases, usually a smaller number. In contrast to this, specific conclusion case studies are concerned with finding specific conclusions from one in depth case study (Gummesson 1991; Flyvbjerg 2006). A specific conclusion case study was utilised for this dissertation as the author felt that an in-depth analysis was necessary to satisfy the research question and objectives.

### **5.5.2 Benefits of the Case Study Approach**

Case studies allow researchers to investigate multifaceted social experiences or situations that have potentially many variables, which need to be considered in order to understand the phenomenon. Therefore, a realistic and holistic view of a case can be gained from an in-depth case study, as the case is anchored in true life stories and circumstances (Cohen et al. 2011). Furthermore, case studies have a comparative advantage in that the practices, processes and experiences are easily compared to other research that has been completed on a topic (George & Bennett 2004).

### **5.5.3 Challenges to the Case Study Approach**

Case studies are used to determine a hypothesis but are limited when testing them, consequently, they are often deemed to lack rigour as the author and their interpretations may impact the conclusions of the dissertation (Gomm et al. 2002; Fisher 2007; Potter et al. 2010). In addition to this, there is also a view that case studies may be less effective and comprehensive than quantitative methods based on numbers and statistics (Gummesson 1991).

## **5.6 Research Methods**

### **5.6.1 Quantitative Research**

Bryman and Bell (2011) describe quantitative research as “*a collection of numerical data and as exhibiting a view of the relationship between theory and research as deductive, a predilection for a natural science approach and as having an objectivist conception of social reality*” (p.150). Ultimately quantitative research is concerned with data in the form of numbers, or data that could be quantified in order to satisfy the research objectives (Cohen 2011). Quantitative research typically involves collecting data from a large number of

participants and performing statistical analysis to determine information that may apply to the whole population being studied (Polonsky & Waller 2011).

### **5.6.2 Qualitative Research**

Bryman and Bell (2011) describe how qualitative research is “*concerned with words rather than numbers*” (p.386). Furthermore, qualitative research aims to “*understand, describe and explain social phenomena from the ‘inside-out’*” through the analysis of experiences, interactions and documents (Gibbs 2007 p.10). Qualitative data most commonly involves collecting a vast amount of data from both primary and secondary sources, and drawing a valid conclusion based on the data collected (Sekaran & Bougie 2010). Additionally, qualitative research is concerned with meanings, case studies and building a hypothesis from data (Silverman 2011).

Qualitative research was chosen for the purpose of this dissertation as the author felt that gaining an understanding of the respondent’s experiences and interactions with HR analytics was necessary to achieve the research question and objectives. Furthermore, qualitative research better satisfied the case study approach adopted by the author and presented the author with the opportunity to make conclusions based on the primary and secondary data collected.

#### **5.6.2.1 Methods of Qualitative Research**

Polonsky & Waller (2011) assert that there are a number of qualitative research methods that may be used, some of which include:

- Individual one on one interviews
- Semi-structured interviews
- Focus Groups
- Case Studies
- Document-Base Research

Having reviewed the various qualitative research methods available, the author was of the view that semi-structured interviews were the most value adding method of data collection. This will be detailed further in section 5.7.

### **5.7 Sample Selection**



Sampling is based on the principle that by selecting a certain proportion of the population, the researcher may draw conclusions about the population as a whole (Saunders et al. 2009; Cooper & Schindler 2010). Non-probability sampling is non-random and subjective, meaning that the population is selected by the researcher (Denscombe 2010; Daniel 2012). The most common form of non-probability sampling is purposive sampling. Purposive sampling is best suited when the researcher needs to obtain information from a specific target group in order to achieve their research objectives (Sekaran & Bougie 2010; Bryman & Bell 2011). Due to the context of the research objectives and the limited number of organisations available who engage in HR analytics, purposive sampling was chosen as the preferred sampling technique. Furthermore, purposive sampling gave the author the freedom to select the target population which was necessary in order to satisfy the case study approach adopted.

## **5.8 Interviews**

Qualitative interviewing is the most common qualitative data collection method adopted by researchers (King and Horrocks 2010). Qualitative interviewing is widely used because it enables the researcher to investigate the experiences and opinions of others and ultimately gain an understanding of other peoples perspectives (Seidman 2006). Furthermore, qualitative interviewing enables the researcher to recreate or illustrate events in which they have never witnessed as well as enable them to “*explore complex, contradictory or counterintuitive matters*” (Rubin 2012 p. 7).

There are a number of qualitative interview types such as: structured interviews, semi-structured interviews, unstructured interviews and focus groups (Wilkinson & Birmingham 2003).

### **5.8.1 Semi-structured Interviews**

With semi-structured interviews, the researcher has a pre-developed interview guide which is based on satisfying the research objectives (Lodico et al. 2010). Ultimately, the interviewer has the flexibility to more freely direct the interview process, yet still has a set of integral questions that form the foundations of the interview (Saunders et al. 2000; Wilkinson 2003; Byrne 2013). Subsequently, the interviewee may speak more openly and freely about the topic with the researcher directing or realigning them when necessary (Rubin 2012).

Semi-structured interviews were chosen as they afforded the author with the flexibility to allow the respondents to speak freely and also enabled the author to probe issues of interest. In addition to offering flexibility, semi structured interviews also permitted the author to prepare and direct the interview to ensure that all critical themes were addressed (Wilkinson and Birmingham 2003).

## **5.9 Ethics/Confidentiality**

Miller et al. (2012) outline the importance of “*building rapport*” and “*agenda setting*” when completing primary data collection (p.110). The author attempted to build rapport with the respondents by communicating with them on several occasions before the semi-structured interviews were scheduled (appendix E). The author was aware of the importance of handling any primary data collected in a respectful manner and recognised how fundamental it was to appreciate the dignity, privacy and confidences of the respondents (Quinton & Smallbone 2006). The author particularly understood how critical confidentiality was and how integral it was that the identity of the organisation and the respondents was not disclosed (Silverman 2011). As recommended by Fisher (2007), the author negotiated the terms of reference with the chosen organisation and took action in order to ensure confidentiality, which is further outlined in the next section.

### **5.9.1. Designing the Interview Schedule and Interview Protocol**

When developing the interview schedule, David and Sutton (2011) recommend that the researcher outlines a set of key themes and formulates their questions based on these themes. The researcher should ensure that the interview questions are open-ended, purposeful and unbiased (Polonsky & Waller 2011). In addition to this, it would be beneficial for the researcher to use techniques such as prompts, probing and clarification in order to gain a more in-depth insight and understanding (King & Horrocks 2010; Rubin 2012).

Jacob and Furgerson (2012) advise researchers to develop an interview protocol before commencing their primary research. They describe how an interview protocol not only includes the interview schedule but also a predetermined script for before and after the interview, as well as documentation for the interviewer to collect informed consent.

Prior to the interview, the author developed an interview schedule in which the questions were formulated based on the themes identified in the literature review. The interview schedule can be seen in appendix B. In line with the recommendations made by Fisher

(2007) and Jacob and Furgerson (2012), an interview protocol was also developed which was read to each of the respondents before commencing the interview process. The interview protocol outlined the confidentiality and procedure which was followed by the author. Furthermore, it detailed the respondents consent for the interview to be recorded and the author's agreement to ensure anonymity on all data collected (appendix C). Additionally, each respondent was asked to sign a consent form which is available in appendix D.

## **5.10 Validity and Reliability of Semi-Structured Interviews**

### **5.10.1 Validity of Semi-Structured Interviews**

Validity refers to “*whether the findings are really what they appear to be about*” (Saunders et al. 2009 p.102). Sekaran & Bougie (2010) assert that there are three tests of validity that can be applied to the interview schedule. Content validity ensures that the interview schedule is representative and reflects the theme being researched, criterion-related validity involves measuring the results against predefined criteria, whereas, construct validity, compares the results against the theory already established (Cooper & Schindler 2010).

The author made every attempt to ensure that the semi-structured interviews were valid. As aforementioned, the author developed the interview schedule based on the themes identified in the literature review, ensuring content validity. This also facilitated construct validity as the information collected from the respondents was able to be compared to the already established literature.

### **5.10.2 Reliability of Semi-Structured Interviews**

The reliability of the interview schedule is very important as it measures the consistency of the data collected and ensures that is dependable, representative and accurate (Sekaran & Bougie 2010). Saunders et al. (2009) proposes two tests of reliability. Internal consistency involves subdividing questions into themes, while alternative form refers to asking similar questions to determine the consistency of the responses.

When preparing the interview schedule, the author was adamant that the questions ensured the reliability of the data collected from the respondents. The author used the test of internal consistency when they subdivided the questions into themes. In addition to this, the author asked a small number of similar questions to test the consistency of the respondent's

responses, satisfying the alternative form test. As already mentioned, the interview schedule is available in appendix B.

### **5.11 Data Analysis**

Robson (2002) and Neuman (2010) describe how qualitative data analysis is concerned with reaching conclusions from the data collected by identifying patterns and trends. They assert that this is done by sieving through the data using tools such as coding and memos, and by organising the data. Similarly, David and Sutton (2011) outline two types of qualitative data analysis. Content analysis analyses qualitative data in unit form while, contrastingly, discourse analysis is concerned with coding coherent sentences, words and themes.

For the purpose of this dissertation, the data collected was segmented into four key themes which were aligned to the research objectives. All activities of data analysis were exercised with content analysis being used to gain a better understanding and to draw a conclusion.

### **5.12 Conclusion**

This chapter sought to identify the methodological pathway used by the author in order to achieve the research objectives. Having considered all approaches, the author decided to complete qualitative research in the form of a specific conclusion case study, using semi-structured interviews. The importance of validity and reliability were also addressed as well as the ethical considerations. Chapter six now outlines the findings collected from the qualitative research conducted.

***CHAPTER 6***  
***RESEARCH FINDINGS***

## Chapter 6

### RESEARCH FINDINGS

#### 6.1 Introduction

This chapter presents the findings from the primary research conducted. As mentioned in chapter one, the findings have been arrived at having conducted seven semi-structured interviews. The findings themselves are structured primarily around the themes presented in the literature review as well the research objectives.

#### 6.2 Background of Respondents

The author conducted a case study on one of the world's largest and most valuable cloud computing organisations, who rank highly in Fortunes Best Companies to Work For and Most Admired Companies in 2014. They have in excess of 500 employees in their Dublin offices. The respondents interviewed were all employees of the Dublin based head office and included a Senior HR Business Partner; HR Generalist; HR Intern; Senior Recruitment Consultant; Graduate Recruitment Consultant; General Office Manager and a Senior Financial Analyst (see table 6.1).

**Table 6.1 Interview Details**

Company	Respondent	Job Title
X	A	HR Generalist
X	B	Senior Financial Analyst
X	C	Senior Recruitment Consultant
X	D	HR Business Partner
X	E	Graduate Recruitment Consultant
X	F	HR Intern
X	G	General Office Manager

## **6.3 Research Findings**

### **6.3.1 Context of the HR Function**

Each respondent described how the HR headquarters for the EMEA region is located in London. In addition to this, each regional office have their own smaller HR function, such as Munich, Paris and Dublin. Furthermore, each region is assigned a senior HR Manager who, according to respondent E, *“reports directly to the VP in London and the leadership team”*.

The HR function in Company X’s Dublin office is primarily a support function with respondent E and F describing the function as a *“business partner”*. Interviewee F referred to *“how we deal a lot with management and the executive leadership team...the whole point of the HR function here is to be a business partner so we have to make sure all of our decisions are aligned with the business”*. The HR function in the Dublin office consists of a senior HR Manager, a senior HR Business partner, a HR Generalist, and a HR Intern.

#### **6.3.1.2 Organisational Perception of the HR Function**

Five of the seven respondents agreed that the HR function is viewed in a positive light. Despite this, the HR function is not without its challenges with respondent A and respondent B asserting that the function is *“understaffed”*. Due to this, the perception as alluded to by five of the seven respondents, is that the HR function acts primarily as *“fire-fighters”*, adopting a reactive rather than proactive role.

### **6.3.2 Strategic Positioning of the HR function**

Three of the seven respondents asserted that HR are involved in strategy formulation as the organisation is very *“young and fluid”*. Contrastingly, due to the high HR/employee ratio (1:150), four of the seven respondents felt that the HR function was not operating in a truly strategic manner. However, the HR function is placing emphasis on improving its strategic capabilities. The executive leadership team have monthly and ad-hoc meetings with the senior HR Manager as well as annual meetings to agree and set objectives. Furthermore, respondent D asserted that *“our strategic thinking and alignment has definitely upped its ante in the last 12 months...we are undeniably improving but still have a long way to go”*, referring to the transition from a less operational function to a more strategic function.

### 6.3.2.1 Activities and Competencies of HR Professionals

Five of the seven respondents asserted that HR professionals are typically engaged in transactional and administrative activities. The most common activities undertaken by HR professionals, as alluded to by all of the respondents, are listed in table 6.2.

**Table 6.2: Most Common Activities Undertaken by HR Professionals**

Most Common Activities Mentioned	
1	Performance Management
2	Career Progression
3	Onboarding
4	Career Planning
5	Induction
6	Attrition Turnover

The four most important competencies required for successful HR professionals as agreed by all of the respondents may be seen in table 6.3. It emerged that being discreet is the most fundamental competency and that breaking the trust of company X is the most serious offence. In addition to this, the importance of being empathetic was stressed by the respondents but they also noted that being resourceful and striking the balance between being empathetic and “*getting the job done*” is essential in such a fast paced organisation (respondent A and D).

**Table 6.3: Most Important Competencies Required for Successful HR Professionals**

Most Important Competencies for Successful HR Professionals
1. Discreet
2. Empathetic
3. Resourceful
4. Strategic Thinkers



### **6.3.3 E-HRM and Technology Deployment in HR**

The e-HRM system used by Company X is 'Workday'. Respondent D described Workday as *"a database which has a profile on every employee and is our main go-to system that we dip in and out of every day...you can see any transactions that have been done in terms of processing, salary increase and promotion...it captures every piece of data about employees"*. All HR analytics with the organisation are generated through Workday.

Dreamjob Central is an employee self-service technology introduced over the last 12 months. The goal of Dreamjob Central is to automate some of the operational activities of the HR function, with the hope that this automation will enable HR professionals to engage in more strategic activities. Respondent F labelled Dreamjob Central a *"one-stop-shop"* where rather than being asked repetitive, routine questions *"we encourage employees to go to Dreamjob Central where we have articles available and if they can't find the answer there, they can ask the question online either privately or publically"*.

#### **6.3.3.1 Users of e-HRM Information**

Each respondent detailed how only the HR team have complete access to the e-HRM system - Workday. Respondent F outlined how the HR function may access all HR information on Workday globally. However, this access is strictly limited to the HR function as *"not even recruitment can see it"*. All employees have restricted access to Workday enabling them to alter their personal profiles.

Four of the seven respondents believed that managers have access to the information stored about their direct reports. Respondent C provided context to this when they stated *"managers would have access and then HR would have a further level of access"*.

#### **6.3.3.2 E-HRM, Strategy and Value Creation**

Three of the seven respondents were adamant that e-HRM assists the HR function in operating strategically. Respondent E asserted that e-HRM enables HR professionals to *"spend time on more value adding HR projects"*. Contrary to this, respondent A, B and F believed that the e-HRM system is not supporting the HR function as strategically as they would like. Respondent B referred to how it is used predominantly for transactional purposes while respondent A stated that *"we do not use e-HRM very strategically at the moment and I think that will be a common theme throughout the interviews"*.

Despite the different perceptions about how well e-HRM assists the HR function strategically, all respondents agreed that e-HRM adds value to the function as a whole. Each respondent considered e-HRM to be of vital importance and emphasised how e-HRM is integral for HR analytics to take place. Furthermore respondent F, stressed that the value generated by e-HRM is evident in the HR analytics it creates, affirming that *“when the senior HR Manager goes into a meeting with the executive leadership team, the first thing they would ask for is HR analytics such as your attrition rate etc”*.

#### **6.3.3.3 Impact of e-HRM**

An interesting point to note is that all respondents were in agreement that the HR function does not effectively use and maximise the potential of e-HRM. Respondent B referred to how many people contacted the finance team instead of HR directly as *“HR can’t respond as quickly as we can do it, therefore they are probably not using it effectively”*. According to the respondents, the capability of ‘Workday’ to produce reports was limited and the system needed to be improved in order to fully deliver its analytical potential.

Five of the seven respondents were of the view that the HR function will place a significant emphasis on improving the system and generating better reports and metrics in the future. Respondent A noted that *“we didn’t effectively use e-HRM at all but we are starting to more and more”*. Three of the seven respondents believed that HR are reluctant to engage in the use of HR analytics. Part of the reason for this reluctance is due to the limited capacity of Workday to produce reports. Another significant reason is that HR lack the training required, as mentioned by respondent G, *“a lot of the reason is because people say ‘I am not trained as an analyst’ and ‘I don’t know how to use the tool’*.

#### **6.3.4 HR Analytics**

When asked about their understanding of the term HR analytics, two respondents (A and F) considered it to be about *“HR numbers, HR stats and quantifying HR to create metrics”*. Two respondents (E and G) termed HR analytics *“data about people”*. Respondent C defined HR analytics as *“the analysis that can be generated from the HR tools”*. Likewise, Respondent B described HR analytics as *“the analysis around headcount, volume levels, management levels and tracking career progression”*, while respondent A noted *“I would see it as any reporting and analytics that emerge from the HR tool”*.

#### 6.3.4.1 Spectrum Outlining Company X's use of HR Analytics

Each respondent was given a spectrum which offered a categorisation of how effectively company X uses HR analytics. The results can be seen in table 6.4.

**Table 6.4: Spectrum Outlining Company X's use HR Analytics**

	Percentage	Respondents
Analytically Challenged	43%	D, B, F
Analytical Practitioners	43%	E, A, G
Analytical Innovators	14%	C

Respondent D, who considered company X to be analytically challenged, was adamant that the HR function needs to engage more effectively in HR analytics. The respondent referred to an offsite EMEA meeting for all HR professionals and described how the main theme that emerged was that *“HR need analytics”*. Furthermore, she asserted that *“it is very difficult to argue a point with the business such as the attrition rate if you do not have the metrics to back it up”*. Respondent A was more positive and suggested that company X has moved from being analytically challenged to the analytical practitioners category.

#### 6.3.4.2 Rationale for Using HR Analytics

**Table 6.5: Rationale for Using HR Analytics**

Rationale	Number of Respondents	Respondent
Identifying Trends/ Tracking	5	B,E,C,A,G
Strategic Planning/Prediction	4	D, C, G, E
Decision Making	2	B, E
Preventive Measure	1	C
Weight to Argument	1	F

Table 6.5 outlines what the respondents considered to be the rationale for using HR analytics. The main rationale that emerged was that HR analytics are used to identify trends and assist the organisation in planning for the future. Respondent D expressed the view that *“you need*

*to be able to plan for the future and if you don't have HR analytics you are walking a bit blind". Equally, respondent C provided further insight and outlined how "we need every bit of data on who we have, how we attracted them, how long they stayed, why they left and what they did during their time here in order to know how to attract and retain the right people".*

#### **6.3.4.3 E-HRM and HR Analytics**

All respondents considered e-HRM fundamental for the successful delivery of HR analytics. When asked about the role e-HRM plays in HR analytics, respondent A stated *"a lot, without Workday I couldn't pull reports"*, while respondent D asserted *"the main role because that is where the information comes from"*.

Furthermore, five of the seven respondents were confident that the organisations' technology and cloud computing background made it easier for them to adopt HR analytics, as embracing new technology is embedded in the organisational culture.

#### **6.3.4.4 Responsibility for the Analysis of HR data**

As may be seen in table 6.6, there are a diverse range of teams across the organisation involved in generating HR analytics.

**Table 6.6: Teams involved in Analysing HR Data**

Team	Number of Respondents	Respondent
HR	7	A, B, C, D, E, F, G
Strategy	4	C, D, F, G
Finance	3	B, D, G
Recruitment	2	C, F

It is interesting to note that despite all respondents agreeing that it is the HR functions' responsibility to drive HR analytics, four of the seven respondents believed that the HR function is not necessarily embracing the leadership role in driving HR analytics. Respondent B emphasised that *"we don't own the data in finance but we do a lot more with it...we tend to be looking at the database and asking questions such as: this is the fifth person to leave for LinkedIn, why is that?"*.

Although some of the HR respondents (A, D and F) agreed that they needed to place more emphasis on generating HR analytics, they asserted that the HR function are improving in this regard. They alluded to how they have a specialist team in the UK office who are

responsible for HR analytics. Respondent A provided further insight, *“in the US we cut a lot of the training and development courses because we looked at the analytics and saw that the participation levels were not justifying the cost”*.

All respondents noted that company X have not approached the acquisition of analytical talent or invested in training to develop the analytical capabilities within the HR function, which is something all respondents agreed the organisation needs to do.

The key competencies necessary for HR professionals to successfully engage in HR analytics, as considered by the respondents, may be seen in table 6.7.

**Table 6.7: Key Competencies Necessary for HR Professionals to Successfully Engage in HR Analytics**

Competencies	Number of Respondents	Respondents
<b>Enquiring Mind</b>	4	B, C, D, E
<b>Technical</b>	3	A, B, D
<b>Mathematical</b>	3	A, F, G
<b>Data Literate</b>	3	C, F, G
<b>Logical</b>	2	F, G

#### 6.3.4.5 The Reports Generated by HR Analytics

The perception of the frequency of reports generated from HR analytics varied considerably. Respondent B, C, E and G described how reports are generated *“monthly at a smaller level and quarterly at a higher level”* (respondent C).

The HR respondents (A, D and F) noted that HR analytical reports are generated on a more frequent basis - daily and weekly. Respondent A mentioned that she runs a *“headcount report every Monday, an attrition report monthly for the leadership meetings and exit interview statistics every three months”*. In addition to this, all respondents noted that ad-hoc reports are also generated if requested by the leadership team. They also emphasised that they run reports based on the needs of the business. Furthermore, the HR respondents also noted that there is an employee in the UK headquarters who works solely on Workday and *“she would constantly be looking at reports for the EMEA region”*.

The most frequent reports generated by HR Analytics are listed in table 6.8.

**Table 6.8: Most Frequent Reports Generated By HR Analytics**

Most Frequent Reports Generated By HR Analytics
Attrition
Headcount
Exit Interview Statistics
Tenure
Compensation & Average Earnings
Recruitment Statistics

#### **6.3.4.6 Users of Information Generated by HR Analytics**

Respondent D referred to the fact that HR are “*one of the main support functions of the business*” and therefore they have many stakeholders. Respondent A, B and F asserted that the recruitment function in HR are constantly looking for attrition reports while team leaders often want to know the HR statistics for their global team. In addition to this, the sales team occasionally request headcount numbers in order to prove to potential customers that the organisation will be sustained in the future. The most common users of the information generated from HR analytics may be seen in table 6.9.

**Table 6.9: Users of Information Generated from HR Analytics**

Users	Number of Respondents	Respondents
Executive Leadership Team	7	A, B, C, D, E, F, G
Functional Leaders	6	A, B, C, D, E, G
Strategy	5	A, C, D, F, G
Recruitment	5	A, B, C, D, F
Finance	3	D, F, G
Payroll	1	F

#### **6.3.4.6.1 Challenges Associated with Generating HR Analytics**

There are a number of challenges faced by those charged with generating the HR analytics. Four of the seven respondents mentioned that the HR team lack the training to use the tools and analytical talent. Respondent F emphasised that the HR team need to be trained to interpret the reports, noting that, *“I once gave an incorrect report to the leadership team because I didn’t know how to read it...a report is only as good as the person who can understand it”*. Another key challenge outlined by five of the seven respondents is to ensure that the information imported into Excel, which is then subject to analysis, is accurate. Respondent D observed that *“if you put rubbish in, you will get rubbish out”*.

#### **6.3.4.7 The Impact of HR Analytics on the HR Function**

The respondents mentioned various ways in which HR analytics impacted the strategic functioning of HR. All respondents were confident that HR analytics could have a very positive impact on the strategic functioning of HR but felt that HR analytics were still being used at a predominantly transactional level. In addition to this, all respondents agreed that company X could extract a greater impact from HR analytics if they utilised analytics to a better extent and more efficiently and effectively.

Respondent E emphasised that HR analytics enables the function to measure the quality of the organisations employees. Respondent A pointed out that HR analytics have the potential to highlight areas that need improvement, thus enabling the HR function to base their goals on achieving these improvements: *“we found from our surveys that we had an issue with maintaining the organisational culture due to our rapid expansion and also our engagement and attrition rates were below average”*. As a result, the HR function developed three goals for 2014 which are:

- Decrease attrition,
- Increase engagement,
- Maintain a brilliant culture.

Three out of the seven respondents argued that HR analytics increases the credibility of the HR function, as the function has ratios and statistics to back up their argument to the leadership team. In support of this, respondent D stressed that HR analytics *“elevate the HR function in a business to a very high level”*.

All respondents believed that HR analytics undoubtedly assist HR professionals in delivering the organisations strategic objectives, with respondent A stating *“hopefully we will be able to tell the business next year that we decreased attrition, increased engagement and maintained a great culture”*. Finally respondent D observed that *“if you have legitimate strong data for the rest of the business, I think you are a lot of the way there in terms of supporting them from a strategic perspective and helping them to achieve their strategic objectives”*.

#### **6.3.4.8 Benefits of HR Analytics**

Six of the seven respondents were of the view that HR analytics improve the credibility and professionalism of the HR function. Additionally, four of the seven respondents alluded to how HR analytics may enable HR professionals to become more strategic and future focused. Respondent A referred to how *“without HR analytics you could get caught up in the really operational stuff without making any real strategic difference to the business”*.

Four of the seven respondents emphasised how HR analytics may improve the decision making of HR professionals. They asserted that HR analytics may improve decision making by enabling HR professionals to be more proactive due to the information available to them. Furthermore, they also described how HR analytics may act as a preventative measure as the function may predict things that are likely to happen in the future. Likewise, Respondent G asserted that HR analytics gives weight to an argument: *“the more analytics HR have when they go into a meeting, the more people will rank them...it gives weight to their argument”*.

#### **6.3.4.9 Organisational Impact of HR Analytics**

Respondent E and G referred to how HR analytics provide consistency. In support of this, respondent F described HR analytics as *“the pulse of the organisation”* as the organisation may see exactly what is happening with its people. All respondents were in agreement that the organisational value gained as a result of HR analytics is very high. Each of the respondents were adamant that if HR do not engage in HR analytics, they will fall behind competing organisations and their ability to grow may be restricted. Finally, respondent D noted that HR analytics enables the organisation to *“better plan for what may happen in the future and become more proactive rather than reactive”*.

#### **6.3.4.10 Implementing HR Analytics**

All respondents suggested that it is critical to have defined objectives and clear expectations when implementing HR analytics. Respondent D considered it essential to *“hire or engage in the services of a HR professional who has a strong analytical background”* and asserted



that recruiting the right analytical talent is almost half the battle. Three of the seven respondents stressed that training in the early stages is vital with respondent A stating *“if we were to start this all over again, everyone would be trained and be able to generate and read analytics”*.

Additionally, two of the seven respondents referred to how HR are often reluctant to generate HR analytics because they are hesitant of what they may find and emphasised that HR professionals must actively engage in HR analytics in order to *“be able to track and make the right decisions to prevent things that might impact on the business in the future”* (respondent C). On a concluding point, two of the seven respondents asserted that auditing the information to ensure the accuracy of the HR analytics generated is particularly important.

## **6.4 Conclusion**

This chapter has presented the findings which emerged from the seven semi-structured interviews completed. The findings were presented keeping in line with the main themes and research objectives of the dissertation, exploring the use and impact of HR analytics in a world leading cloud computing organisation. Chapter 7 now moves on to explore the interpretation of these findings considering the research presented in literature review.

***CHAPTER 7***  
***DISCUSSION***

## Chapter 7

### DISCUSSION

#### 7.1 Introduction

The objective of this chapter is to compare and contrast what was examined in the literature review and what was found in the research findings. The discussion will be structured around the themes presented in the research findings chapter and will be specifically focused on achieving the authors research objectives. In order to ensure continuity and consistency, the discussion will be structured under the following headings:

- Strategic Positioning of the HR Function
- E-HRM and Technology Deployment in HR
- HR Analytics

#### 7.2 Strategic Positioning of the HR Function

The research findings provided background data on company X and illustrated that company X is a global organisation whose HR function must serve employees from various geographical regions. The HR headquarters for the EMEA region is located in London, with supporting HR functions located in subsidiary regions such as Dublin. The need for HR to legitimise its role and operate strategically has been recognised in the literature review (Ulrich 1998). Mondore (2003) described how truly strategic HR professionals spend their time on planning, developing strategies and promoting strategic change. With reference to the research findings, the HR function in company X is transitioning to becoming a strategic partner, however, they currently operate primarily as a support function or as a business partner. The HR function in the Dublin office assumes a reactive role and are not operating strategically, as recommended by Ulrich (1998). Despite this, the organisation recognises the need for the function to operate strategically and the strategic capabilities of the function are improving with one respondent asserting that *“our strategic thinking and alignment has definitely upped its ante in the last 12 months...we are undeniably improving but still have a long way to go”*.

### **7.2.1 Activities and Competencies of HR Professionals**

Having reviewed the literature in the area, it is evident that HR professionals traditionally have been engaged in transactional and administrative activities (Lepak & Snell 1999; Sheehan & Cooper 2011; Bondarouk & Ruel 2013). This tradition extends itself to company X where HR professionals typically spend their time on administrative activities such as performance management, career progression and onboarding. Furthermore, Ulrich (2012) and the CIPD (2013) identify a number of competencies which HR professionals must demonstrate in order to be operating in a ‘truly’ strategic capacity. There were some disparities between the competencies mentioned in the research findings and those recommended in the literature. Despite this, the need for HR professionals to be strategic was significantly consistent throughout both.

### **7.3 E-HRM and Technology Deployment in HR**

The literature describes how e-HRM automates routine and transactional HR tasks, enabling the HR function to improve responsiveness and better serve the needs of employees, line managers, functional managers and top management, ultimately supporting the transitioning of HR to a strategic function (Kovach & Cathcart 1999; Kumar & Pandya 2012). Furthermore, it is apparent in the literature that e-HRM improves the efficiency of the HR function and is a prerequisite for organisations to effectively engage in HR analytics. The research findings refer to how company X use an e-HRM system called ‘Workday’ which is a database that captures all data on each of the organisations employees and, in line with the literature, the respondents asserted that all HR analytics are generated through Workday.

Supplementary to this, company X also have an employee self-service system entitled ‘Dreamjob Central’. The employee self-service system as alluded to in the literature, automates some of the transactional activities of the HR function by enabling employees to self-serve, alleviating HR professionals of these activities and affording them with the opportunity to focus on developing the strategic capabilities of the function and engage in HR analytics (Bondarouk & Ruel 2009; Martin & Reddington 2010).

#### **7.3.1 Users of e-HRM Data**

The research findings identified that a diverse range of stakeholders use and benefit from the reports generated by Workday, specifically; employees, line managers, functional managers and top management. HR professionals are the only employees who have complete access to

Workday and the reports generated from it, however, these reports benefit various stakeholders as the HR function have access to better information, thus improving organisational decision making. This is similar to the view expressed in the literature review where it is suggested that e-HRM provides data that enhances better decision making of employees, line managers, functional managers and top managers alike, and provides the platform for HR analytics to take place (Bose 2008). Furthermore, the literature also alludes to how employees and managers may benefit through the self-service offered by e-HRM which is evident in company X since the introduction of Dreamjob Central (Srivastava 2010).

### **7.3.2 E-HRM, Strategy and Value Creation**

In the literature surrounding e-HRM and value creation, Haines (2008) and Parry (2011) assert that e-HRM improves the functionality of the HR function and alleviates HR professionals of some of their transactional activities, aiding the transition of the HR function to a more strategic function. The research findings were consistent with the concept that e-HRM assists the HR function in operating strategically, if used correctly. However, the research findings also found that company X are not maximising the potential of Workday and therefore the e-HRM system is not supporting the HR function and improving its strategic capabilities as they would like, with one respondent expressing *“we do not use e-HRM very strategically at the moment”*. Despite its limitations in company X, all respondents were adamant that e-HRM adds value and considered it essential in order for HR analytics to take place. They were of the view that the value created by e-HRM is clearly evident in the HR analytics it generates. Similar to this, the literature also notes that e-HRM may generate value for organisations and provide the opportunity for organisations to successfully engage in HR analytics (Parry 2011; Kassim et al. 2012).

### **7.4 HR Analytics**

Bassi (2011) defines HR analytics as *“the application of a methodology and integrated process for improving the quality of people-related-decisions for the purpose of improving individual and/or organisational performance”* (p.16). Interestingly, the research findings were inconsistent with this definition and the most common definitions alluded to were that HR analytics are concerned with *“data about people”* and *“HR numbers, HR stats and quantifying HR to create metrics”*.

#### **7.4.1 Spectrum Outlining Company X's use of HR Analytics**

As presented in the literature by Kiron et al. (2012), organisations may adopt HR analytics at different levels along a spectrum, ranging from analytical innovators to the analytically challenged. Furthermore, the literature illustrates that the majority of organisations fall in the middle of the spectrum; the analytical practitioners category (Kiron et al. 2011). This was illuminated in the findings when it was found that company X's analytical capabilities lie between the analytically challenged and analytical practitioners category. The need for company X to increase its involvement in HR analytics and move towards the analytical innovator category was apparent in the findings with one respondent noting *"it is very difficult to argue a point with the business such as the attrition rate if you do not have the analytics to back it up"*.

#### **7.4.2 Rationale for Using HR Analytics**

The research findings uncovered that company X initially began to engage in HR analytics in order to identify trends. Additionally, another significant rationale for their involvement in HR analytics was the ability to predict and make long term strategic plans. This is partly consistent with the literature which highlights that organisations predominantly engage in HR analytics in order to predict trends, however, the literature also notes additional reasons for organisations involvement in HR analytics such as; to reduce risks, improve performance, and maximise returns (Cornell University 2010).

#### **7.4.3 E-HRM and HR Analytics**

An important finding which arose from the research findings was the critical role in which e-HRM plays in generating HR analytics. Each of the respondents considered e-HRM to be fundamental to the successful generation of HR analytics with one respondent noting that Workday plays *"the main role because that is where the information comes from"*. This coincides with the literature as the literature asserts that e-HRM is the driving force behind HR analytics and is a prerequisite for the successful generation of HR analytics (Philpott 2010; Kapoor & Sherif 2012; Weeks 2013).

#### **7.4.4 Responsibility for the Analysis of HR Data**

The CIPD (2013) notes that HR professionals are often reluctant to engage in HR analytics as they fear they lack the numerical, financial and IT capabilities. As a result, the responsibility for the generation of HR analytics often lies with the IT and finance functions of the business, hindering HR's transition to a more strategic function and encumbering the credibility of the

HR function (Davenport et al. 2010; Bassi 2011; Sesil 2014). The research findings support this viewpoint and the majority of respondents were of the view that the HR function is not embracing the principal role in driving HR analytics but instead, the strategy and finance teams are assuming this role. Despite this, the HR function acknowledged their oversight and asserted that they need to place significantly more emphasis on generating HR analytics. The HR professional's apathetic engagement in HR analytics correlates with the literature surrounding the area, where only 20% of non-HR professional counterparts believe that HR professionals use analytical data to make decisions (Harris et al. 2010; Ingham 2011). .

The literature also considers it integral that organisations develop or acquire analytical talent and expertise in order to effectively engage in HR analytics (Acebo et al. 2012; Sesil 2014). There is a discrepancy between the research findings and the literature in this regard, as it is apparent that company X have not approached the internal development or acquisition of external talent. Although company X have been negligent in this front, they recognise that they undoubtedly need to focus their attention on developing their analytical talent.

There is a divide between the literature and the research findings with reference to the competencies necessary for the successful engagement of HR professionals in HR analytics. The literature considers the most important competencies to be: capability builders, knowledge of psychology, excellent statistical skills, business acumen and adaptive (Boudreau & Ramstad 2004; Levenson 2005; Kneebone & Brown 2012). Alternatively, an enquiring mind, technical capabilities, mathematical, data literate and logically minded were the most significant competencies emerging from the research findings.

#### **7.4.5 The Reports Generated by HR Analytics**

Company X do not use any of the analytical software alluded to in the literature and instead purchase their HR analytical software from a vendor called Workday. The research findings uncovered that the most frequent reports generated were: attrition, headcount, exit interview statistics, tenure, compensation & average earnings, and recruitment statistics. This partially corresponds with the literature, in that similarly the literature considers the most important reports to be: critical talent retention, recruiting effectiveness and compensation and benefits. However, the literature also considers productivity and performance management to be equally significant reports generated by HR analytics (HR Marketer Services Group 2012; Visier 2012).

#### **7.4.6 Users of the Information Generated by HR Analytics**

The literature argues that the most significant users of the information generated by HR analytics are: HR professionals, senior management and other functional managers (Kumar & Pandya 2012). There is an interrelationship between the research findings and the literature where users are concerned, as similarly the research findings consider HR professionals, the executive leadership team, functional leaders and the strategy team to be the most common users of the information generated by HR analytics.

#### **7.4.7 Challenges Associated with Generating HR Analytics**

The literature argues that it is imperative that the information input into the e-HRM system is correct as otherwise the analytics generated would be inaccurate and incoherent (Klepik 2004; Kassim et al. 2012). The research findings concurred with the literature as the majority of respondents referred to how integral it is that the information input into the e-HRM system is accurate in order for the generation of effective HR analytics. One respondent stated *“if you put rubbish in, you will get rubbish out”*. Another noteworthy challenge that emerged in the research findings and not in the literature surrounding the area was the significant role of training. Company X alluded to how one of their most significant challenges when generating HR analytics is that the HR team lack the necessary training, with one respondent asserting *“I once gave an incorrect report to the leadership team because I didn’t know how to read it...a report is only as good as the person who can understand it”*.

#### **7.4.8 The Impact of HR Analytics on the HR Function**

Ingham (2011) asserts that the effective use of HR analytics may improve the performance of the HR function and aid its transition to a more strategic function. The research findings correlate with the literature to an extent. Although company X believe that HR analytics may have a very positive impact on the strategic functioning of HR, they emphasise that they are currently using HR analytics at a predominantly transactional level. In spite of this, all of the respondents were confident that a greater impact could be extracted from HR analytics if the HR function utilised HR analytics more effectively and to a greater extent.

The literature surrounding the area notes that HR analytics may increase the ability of the HR function to interpret and predict, subsequently reducing uncertainty and improving decision making at both an operational and fundamental strategic level (LaValle et al. 2011; Sesil 2014). The research findings draw a parallel with the literature as there was a unanimous consensus that the effective use of HR analytics improves decision making. The credibility



of the HR function is improved as HR professionals have ratios and statistics to make more informed and decisive decisions, consequently supporting the legitimacy of their argument to the leadership team. Moreover, HR analytics enables company X to highlight areas that need improvement and as a result the HR function may set their goals for the year. One respondent alluded to how HR analytics highlighted that company X had an issue with attrition, engagement and culture and so they based their goals for 2014 on improving these.

Finally, Bose (2009) and the CIPD (2013) assert that HR analytics may enable the HR function to become a future focused function who predict trends and patterns, and assist in human resource budgeting, reporting and planning. The research findings concurred with this with one respondent stating that HR may *“better plan for what may happen in the future and become more proactive rather than reactive”*.

#### **7.4.9 The Organisational Impact of HR Analytics**

The literature suggests that by engaging in HR analytics, HR professionals may demonstrate how their policies and practices impact organisational performance and support the development of organisational competencies and capabilities (Fitz-Enz 2010). This was illuminated in the research findings when HR analytics were described as the *“pulse of the organisation”*. There was an undisputed consensus that the value gained from HR analytics is very high and that organisations who do not engage in HR analytics will fall behind their competitors in the future.

#### **7.4.10 Implementing HR Analytics**

When implementing HR analytics, the literature emphasises that the new analytics initiative must be focused on key organisational objectives (Ingham 2011; CIPD 2013). A five stage approach to the successful implementation of HR analytics is presented by Mondore et al. (2011). Similar to the literature, the research findings asserted that it is essential to have clearly defined objectives and clear expectations when implementing HR analytics. However, the research findings were incongruent with the literature in relation to Mondore's five stage approach. Mondore focused on the technical aspect of the implementation process, whereas the research findings focused more on the practical, people aspect. The research findings indicated the importance of engaging in the services of a HR professional with analytical experience in the initial stages and also how fundamental it is that all HR professionals are properly trained early on. Furthermore, the research findings highlighted

that HR professionals must actively and wholeheartedly engage in HR analytics and audit the information regularly to ensure the accuracy of the HR analytics generated.

## **7.5 Conclusion**

In order for the author to meet the research objectives, this chapter has explored the key findings in relation to the themes discussed in the literature review. The findings primarily corresponded with the literature review, however there were some minor discrepancies. Chapter 8 will now present the conclusions drawn from the research findings and the literature review. The limitations of this study will also be addressed as well as the recommendations.

## ***CHAPTER 8***

### ***CONCLUSIONS AND RECOMMENDATIONS***

## Chapter 8

### CONCLUSIONS AND RECOMMENDATIONS

#### 8.1 Introduction

This chapter outlines the research question and research objectives upon which this study was based. The most noteworthy conclusions from both the literature review and the research findings are presented. Finally, recommendations for practice and future research are addressed as well as the limitations faced by the author throughout the duration of this study.

#### 8.2 Research Question and Research Objectives

This study sought to provide an answer to the primary research question:

*How are HR analytics used and what impact do they have on a cloud computing organisation?*

Furthermore, four specific research objectives were derived from the research question:

- i. To identify any links that exist between strategic HRM, e-HRM and HR analytics in a cloud computing organisational context;
- ii. To analyse the extent in which HR analytics are used in a cloud computing organisational context;
- iii. To identify the generators of HR analytics and the users of the data provided from the HR analytics;
- iv. To explore whether HR analytics have any impact on the strategic function of HR and organisational outcomes in a cloud computing organisation.

#### 8.3 Literature Review Conclusions

The literature illustrated how the HR function has undergone a significant reconceptualisation and how HR professionals are now expected to adopt a much more strategic role (Sheehan & Cooper 2011; Bondarouk & Ruel 2013). Furthermore, the literature recognised e-HRM for its strategic capabilities and its capacity to provide HR professionals with management reports, leveraging their ability to engage in HR analytics. Bose (2008) and Bondarouk (2009) conclude that e-HRM is a prerequisite for successful engagement in HR analytics.

The literature surrounding the area describes how HR analytics analyses the reports generated by e-HRM to identify trends and make predictions, which assists the HR function and executive team in making both operational and long-term, core strategic decisions (Bose 2008; LaValle et al. 2011; Kiron, Ferguson & Prentice 2013). Furthermore, it is concluded in the literature that HR analytics has the potential to improve organisational decision making, enhance performance and create a more future focused HR function (Ingham 2011; CIPD 2013; Sesil 2014). An MIT Sloan survey in 2013 further highlighted the potential impact of HR analytics when it identified that organisations who engage in HR analytics may perform 6-9% above the industry average. Finally, despite the potential impact of HR analytics, the literature also concluded that HR professionals have been reluctant to engage in HR analytics, however their engagement is expected to grow significantly over the coming years (Harris et al. 2010; Gardner et al. 2011; Ingham 2011).

#### **8.4 Primary Research Conclusions**

The primary research conducted within one of the world's largest cloud computing organisations found that the HR function within company X is transitioning from a primarily operational function to a more strategic function. The research findings also revealed that the transition is aided by their e-HRM system, 'Workday', and it is from Workday that all HR analytics are generated. An interesting point that emerged was that there was a profound consensus from all of the respondents that e-HRM is integral in order for organisations to successfully engage in HR analytics.

The research findings also highlighted how company X lies between the analytically challenged and analytical practitioner's category, meaning that their analytical capabilities have improved but can be improved further in order to maximise the full potential of HR analytics. It could be concluded from the research findings that although a diverse range of teams are involved in generating HR analytics, company X need to acquire analytical talent and develop their analytical capabilities as the HR function lacks the training and proficiency required to expertly engage in HR analytics.

Moreover, it became apparent in the research findings that HR analytics have a very positive impact on company X as they support the achievement of the organisations strategic objectives, improve the credibility of the HR function and identify critical areas that require improvement. Despite this, it may also be concluded from the research findings that

company X are not maximising the potential of HR analytics and could yield more organisational benefits if they utilised HR analytics to a greater extent and more efficiently.

## **8.5 Limitations**

As mentioned in chapter one, HR analytics is a relatively new and unexplored area. As a consequence of this, the literature surrounding the area is limited which restricted the author when completing their literature review, as at times it was challenging to find reliable and recognised sources. Additionally, it was difficult to secure an organisation with whom to conduct a case study as there is currently a constrained number of organisations engaging in HR analytics.

This study composed of seven semi-structured interviews and therefore is limited in terms of its scope and scale. In addition to this, the word count restriction resulted in the author only using indispensable information and omitting information which potentially may have further added to the study.

## **8.6 Recommendations for Practice**

The author draws the following recommendations for HR functions who may potentially engage in HR analytics in the future:

- It is recommended that the HR function is operating strategically or making the transition to a strategic function in order to maximise the potential of HR analytics, as HR analytics should be used primarily to support strategic decision making and the achievement of the organisations strategic goals.
- It is integral for HR professionals to maximise the potential of their e-HRM system and to ensure that all data input is accurate, as otherwise the reports generated from HR analytics will be inaccurate and incoherent.
- The organisation should hire or engage in the services of a HR professional who has the necessary competencies and experience in HR analytics.
- It is recommended that training is provided to the HR professionals with responsibility for generating and using the information produced from HR analytics in order to ensure that they have the capability to read and understand the reports generated, thus facilitating improved decision making.

- In order for HR analytics to gain commitment and to be truly embedded in the HR functions culture, HR analytics needs to be seen as a top priority across the organisation with senior management avidly supporting its use.

## **8.7 Recommendations for Future Research**

The author draws the following recommendations for future research in this area:

- This case study was restricted to seven respondents, subsequently the author is of the belief that interviewing and observing more respondents and potentially utilising a focus group approach would provide a more in-depth study and add to the research in this area.
- As this research was subject to time constraints, a longitudinal case study would benefit future research. This will allow the researcher to compare the organisational impact of HR analytics between the implementation stage and the later stages of adoption.
- It is recommended that future research should compare the use and impact of HR analytics on organisations who are in the analytical innovators, analytical practitioners and analytically challenged categories.
- It would be beneficial for future research to gain insight from senior management teams in order to grasp their understanding, commitment, belief and perception of the strategic impact of HR analytics on organisational decision making.

## **8.8 Conclusion**

This chapter has presented the most significant conclusions that have been drawn from this study. It has also acknowledged the limitations inherent to this study and outlined recommendations for practice and future research. Finally, this chapter has highlighted the contribution that this study has made in providing a platform for understanding the use of HR analytics and the associated impacts.

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## **Appendix A – Reflective Log**

I was extremely apprehensive at the initial stages of the dissertation and reluctant to confine myself to choosing a topic. Luckily I had read an article about HR analytics in the CIPD's People Management magazine which intrigued and inspired me. The article was based on an emerging topic which was previously unknown to me but one I predict will become a new phenomenon in the HR industry. The fact that HR analytics was an emerging issue served as the foundation for my apprehension as I had been told by many lecturers that "I do not need to reinvent the wheel". Despite this, I felt that undertaking this thesis title would increase my knowledge of strategic HRM and would aid me in my professional development and hopefully in my future career.

Having finally decided on a research topic, I began exploring the literature surrounding the area. This was an extremely challenging task as I found it problematic to find literature from reliable and established sources. Despite this, I contacted professionals from the CIPD with whom I had built networks and they were able to assist me somewhat in my search for literature. As a result of this, the importance of networking protruded to me and is something that helped me in various stages of my dissertation, especially when completing my primary research. Subsequently, I will make every effort to continue to extend my professional networks beyond the completion of this postgraduate degree.

Researching the literature guided me when deciding on how to approach my primary research. Initially, due to the fact that the research topic was relatively new I struggled in gaining organisational access as very few organisations are currently engaging in HR analytics. I decided to complete a case study on a world leading cloud computing organisation. Conducting the primary research was undoubtedly a learning curve as I had to exercise my professionalism in the context of a living organisation. While conducting the interviews, I had to converse with many business professionals which contributed to my personal development. I have recently secured my first job as a HR professional and undoubtedly feel that completing my primary research and operating, albeit briefly, in a professional environment hugely aided me in the interview stages and in my transition to the working world.

My research skills have undeniably improved throughout the dissertation process. The literature review and the methodology are laced with academic references and I ensured that

the references were valid, reliable and recent. As a result, I am confident that I would be able to carry out the research necessary to undergo any project.

Furthermore, my ability to analyse, identify trends and draw conclusions has also improved. The discussion chapter required me to compare the literature and the research findings and draw my own conclusions, which subsequently formed the main contribution of my research. This skill has already benefited me in my professional career as I regularly have to compare reports and determine trends which assist organisational decision making.

Although I am extremely happy with my dissertation, there are a number of things I would do differently. I feel that I chose a challenging and emerging topic which restricted my primary research. Subsequently, I was disappointed with the number of respondents I secured for my primary research and would have liked to interview more. Despite this, I am confident that my dissertation adds to the literature in the area and that my recommendations provide good direction and focus for future research.

Additionally, as my dissertation was part of an extremely busy and tight scheduled postgraduate program, there were a number of occasions throughout the year where my dissertation remained untouched for a number of weeks and subsequently it was often difficult to get back into the frame of thinking and content of my dissertation. Nonetheless, I am confident that I have completed a comprehensive and insightful piece of work. As a result of having to manage and prioritise many projects, my project management skills and organisation skills have improved immensely. The ability to project manage and prioritise will be an expectation as I embark on my career as a HR professional and will certainly pose as a very valuable skill to have in my toolbox.

Overall, I enjoyed the dissertation process although it was extremely challenging at times. The sense of accomplishment and achievement I feel as I conclude my dissertation is overwhelming and I am hopeful that my dissertation will contribute to the limited literature surrounding HR analytics and perhaps provide focus for future researchers.

## **Appendix B – Interview Schedule**

### **Interview Schedule for Company A**

#### **Strategic HRM**

1. How is the HR function currently shaped?
2. Where does the HR function sit in the organisational structure?
3. How do you think the organisation views the HR function? Please explain.
4. To what extent do you feel that the HR function is operating strategically? Please explain.
5. To what extent are HR professionals involved in organisational strategy formulation and implementation? Please explain.
6. What are the typical activities of a HR professional in your organisation?
7. What do you consider to be the key competencies of a HR professional in your organisation?

#### **E-HRM**

8. Can you give an overview of technology deployment in HR within your organisation?
9. Who are the main users of e-HRM information?
10. In what way, if any, does e-HRM assist the HR function strategically?
11. What value in your opinion does e-HRM add to the HR function and the organisation as a whole?
12. In your opinion, do you feel that HR professionals effectively use and maximise the potential of e-HRM? Please Explain.

#### **HR Analytics**

13. What is your understanding of the term ‘HR Analytics’?
14. Analytical innovators have been described as those organisations who have fully embraced the power of analytics. The analytically challenged are those organisations who only use analytics for simple, operational reporting while the analytical practitioners fall in the middle ground.

On this spectrum where would you consider Company A to be?

15. What software or services do you utilise to deliver HR analytics?
16. What in your view is the rationale for using HR analytics in your organisation?
17. What role, if any, do you think e-HRM plays in HR analytics?
18. To what extent does the fact that your organisation is a technology and cloud computing organisation make it easier to adopt HR analytics?



19. Who is involved in the analysis of HR data?
20. What role do HR professionals play in driving and generating HR analytics?
21. How have you approached the acquisition and/or development of talent for HR analytics?
22. What competencies are necessary for HR professionals and other users to participate in HR analytics effectively?
23. How frequently are routine HR analytics generated? Could you give examples please?
24. Could you give some examples of the metrics/reports generated from HR analytics?
25. Who are the users of the information generated from HR analytics?
26. What challenges, if any, are associated with the use of HR analytics?
27. In your view what impact, if any, do HR analytics have on the strategic functioning of HR?
28. In your opinion, do HR analytics assist HR professionals in delivering the organisations strategic objectives? If yes, how?
29. To what extent do HR analytics benefit the HR function and HR professionals? Please explain.
30. In your opinion what value and impact do HR analytics have on the organisation?
31. If you were to offer advice to other organisations beginning to engage in HR analytics what would that be?
32. Do you have any further comments on HR analytics?

## Appendix C – Interview Protocol

Natalie Power

MBS (HRM) Student

Waterford Institute of Technology

087 XXXXXXXX

**April 2014**

**RE: Standard Ethics Protocol for this Interview**

Dear Interviewee,

Thank you for agreeing to participate in the primary research for this dissertation entitled “HR Analytics: use and impact in a cloud computing organisation context”.

Before we commence the interview I would like to advise you of the following:

- Your participation is completely voluntary
- You may refrain from answering a question if you so wish
- You can conclude the interview at your will

Any information given in the interview will remain *confidential and anonymous* at all times; however I may use extracts from the interview in my dissertation. If I have permission, I will record the interview and take notes which will then be transcribed. Yours and the company name will not appear on any material, recordings or transcriptions I collect and they will be destroyed on completion of my dissertation.

I would be thankful if you could sign this document as proof that I have read you its content.

Signed: \_\_\_\_\_

Printed: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

## **Appendix D – Participant Consent Form**

**Researcher: Natalie Power**

**College: Waterford Institute of Technology**

### **CONSENT FORM FOR RESEARCH PARTICIPANTS**

#### **Information Sheet**

##### **Purpose of the Study.**

As part of the requirements for my master's degree at Waterford Institute of Technology, I have to carry out a research study. The study is concerned with the role and use of HR Analytics in terms of Strategic HRM.

##### **What will the study involve?**

The study will involve a semi-structured interview. The questions will be based on the strategic function of HRM, the use of e-HRM and the use of HR Analytics within your organisation. The interview should take between 30-45 minutes.

##### **Why have you been asked to take part?**

You have been asked because you are specifically suitable for my research due to your use of HR Analytics.

##### **Do you have to take part?**

There is no obligation that you participate and indeed, if there are any questions in which you would rather omit, that would be no problem. You will be furnished with a copy of our agreement.

##### **Will your participation in the study be kept confidential?**

I will ensure anonymity and I will ensure that no clues to your identity appear in my dissertation. Any extracts from what you say that are quoted in the dissertation will be

entirely anonymous and you will be referred to as “Company X” and “Participant “A”, “B” and “C” throughout.

**What will happen to the information which you give?**

Any information collected from the interviews will be kept confidential and will not be discussed with any third party. The information recorded will be destroyed after my thesis has been graded (September 2014).

**What will happen to the results?**

The results will be presented in my dissertation. They will be seen by my supervisor, a second marker and the external examiner. The thesis may be read by future students on the course.

**What are the possible disadvantages of taking part?**

I don't envisage any negative consequences for you in taking part.

**Any further queries?** If you need any further information, you can contact me: Natalie Power on, 087 XXXXXXXX or alternatively via email, aaaaaaaaaaaa@gmail.com.

If you agree to take part in the study, please sign the consent form overleaf:

### Consent Form

I.....agree to participate in Natalie Power's research study.

The purpose and nature of the study has been explained to me in writing.

I am participating voluntarily.

I give permission for my interview with Natalie Power to be tape-recorded

I understand that anonymity will be ensured in the write-up by disguising my identity.

I understand that disguised extracts from my interview may be quoted in the thesis and any subsequent publications if I give permission below:

(Please tick one box:)

I agree to quotation/publication of extracts from my interview ☐

I do not agree to quotation/publication of extracts from my interview ☐

Signed.....

Date.....

## **Appendix E – Email to Company X Requesting their Participation**

Dear Ms. X,

My name is Natalie Power. I am a Masters of Business in Human Resource Management student in Waterford Institute of Technology. In October last, your colleague Joe Bloggs gave a very interesting and indeed inspiring presentation about Company X to our masters program as part of one of our modules. I spoke to Joe Bloggs after the presentation and he recommended that I contact you.

I am currently writing my dissertation which has a working title of "A study to identify the use and impact of HR analytics on the strategic function of HR and on organisational outcomes in a cloud computing company". In order to complete my dissertation I am required to conduct primary research. HR analytics is a relatively new term and an under-researched area and so I am wondering if you at Company X use HR analytics?

It is my hope in writing you this email that you would facilitate me in conducting my primary research in your company. In order to satisfy my thesis title I would need access to approximately seven users of HR analytics within Company X, perhaps senior management, HR director, HR manager, HR generalists and other management/HR staff that are familiar with, and either use or benefit from HR analytics.

My primary research would involve semi-structured interviews with the participants which would last between approximately 35-50 minutes. A copy of the interview questions can be forwarded prior to the interviews. If you so wish, Company X can remain confidential and be referred to as "Company X" throughout my dissertation. Due to time restrictions, ideally my research would need to take place between Monday 14th and Friday 25th April.

I really appreciate you taking the time out to read this email and I am extremely hopeful that you can facilitate my request.

Looking forward to hearing from you.

Warm Regards,  
Natalie