

**EXAMINING THE RECENT TECHNOLOGICAL CHANGES IN THE ASPECT
OF HRM PRACTICE: A CASE STUDY OF HR PRACTITIONERS IN
HEADHUNT INTERNATIONAL**

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DECLARATION

I, Emily Ezra Yakusak, hereby declare that this thesis “EXAMINING THE RECENT TECHNOLOGICAL CHANGES IN THE ASPECT OF HRM PRACTICE: A CASE STUDY OF HR PRACTITIONERS IN HEADHUNT INTERNATIONAL” is the product of my efforts submitted to the Dublin Business School in partial fulfilment for the award of Master Degree in HRM.

Apart from references to other people’s works which have been duly acknowledged, this work is the result of my own research; and that it has neither in whole nor in part been presented for another research work in this University or elsewhere.

Signature

Date

Emily Ezra Yakusak

22nd May, 2015

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LIST OF ABBREVIATION

HRM Human Resource Management

HR Human Resource

IT Information Technology

HRIS Human Resource Information system

HRT Human Resource Technology

IS Information system

ICT Information and communication technology

E-HR Electronic Human Resource

PC Personal computer

PDC Personal data computer

LAN Local area network

SBTC Skilled based technical change

HCM Human capital management

SAAS Software as a service

MSS Managerial self service

PDF Portable document file

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ABSTRACT

This study aims at examining the recent technological changes in the aspect of HRM practice. Technology is a tool that has and is still being globally used for the benefit of humanity. It is being utilised by various organisations to meet the needs of its various stakeholders. On a regular basis, new and upgraded versions of technology are being invented. It's been observed that, the distinguishing factor between organisations is their ability to use modern technology to deliver HR service. Technology in HR practice can be used to improve an organisations performance. In as much as technology has been of immense benefit to organisations, it also comes with its challenges and other downsides. This study provides an outlay of how HR technology emerged and its gradual acceptance and practice in organisations. The research is intended to show the need to understand the use of HR technology in organisations and the need to curb its challenges.

CHAPTER ONE

INTRODUCTION

1.1 GENERAL INTRODUCTION

Technology is a tool that has and is still been used for the benefit of humanity. It is being increasingly used by large, small and medium employers to meet the needs of its various stakeholders. As the years goes by, new and improved technological versions are being invented.

As a matter of fact, the distinguishing factor between organisations is their ability to utilise modern technology to deliver HR service. Technology in HR practice can actually be used to upgrade an organisations performance.

This research is intended to show the need to embrace this new technologies for those who still practice traditional HR. The research will show how the use of technology can help a company achieve a competitive advantage over its competitors.

Though studies have been conducted by different Researchers on the subject matter, this research would however be different from previous works because it would also focus on the future trends in HR technology and how professionals can adopt to those trends.

Headhunt int. has been in operation since the early 70's and is globally leading in providing innovative solution to staffing making use of international network of contacts to provide global resources. The company has become an important recruitment advisor to a lot of the best performing organisations in the world with the aim of supporting clients in achieving a competitive advantage, it helps its clients in sourcing for the most qualified candidates at all levels and also across various industrial sectors.

The company chosen for the purpose of these research is subsidiary based in Dublin. It is now more important than ever to engage employees by knowing the recent technological changes in HRM practice. An increasing number of employers are now introducing improved version of technologies as they aid and foster recruitment processes compared. Headhunt int. as a whole offers recruitment services, it employs over 1,500 staff in Ireland in various categories from managers, marketing managers, supervisors, health and safety officers and

customer service. This research investigated technological changes experienced by employees within a small subsidiary employing just over 40 staff in Dublin.

1.2 BACKGROUND OF STUDY

In various organizations, their Human Resource Management departments commenced the deployment of Information Systems (IS) for administrative purposes and this was done to oversee employee records and payroll activities in the 1940s. On getting to 1971, 40% of almost 500 companies began to use information systems and in 1980 almost 40% of every business company employed IS for HR purposes. DeSanctis, G. (1986) these days, the larger number of organizations make use of IS for HR purposes, mainly in HR administration. Information systems which are used for HR purposes are called Human Resource Information Systems (HRIS). As described in Legnick-Hall et al (2003) It is equipped mostly as a platform for administrative duties in HR departments, as a result of the evolution and development of technology, information technology was then deployed to support more HR processes, the internet made it possible for managers and employees to give and get back information online.

Human Resource Management and Technology have a wide range of impact upon themselves, and HR professionals should be able to take up technologies that permit them to re-engineer the HR function and also to be ready to support organizational work design and differences initiated by technology Alok and Ibrahim (2010). Technology is been seen as a critical driver of the HR's growth from its specific focus on administrative task to a focus on being a strategic business partner. This role adds value to HRM and also changes the competencies which examine the success of HR professionals. These days, owing to the potential inherent in the latest and advanced technologies to organise a lot of HR activities, the businesses making use of technology to design and deliver their HR practices are on the increase as the years goes by. These sudden turn of event is attributed to the fact that there are substantial benefits that could emerge from the use of both technology and HR. The growth of information technology has led to a more flexible means of achieving administrative task either by the company or through outsourcing. Even though this growth has been a gradual one, there are proves to show that the roles and responsibilities of HR professionals are developing Lawler and Mohrman (2003).

Information technology has had its impact on HR and one of which is that it has solved some HR challenges such as attracting, retaining, motivating employees, managing the human element of technological change etc. HRM has been supportive of technological effort to innovate in order to achieve high performance and these innovations have helped the HR function to concentrate on value added activities so that the full potential of technology and organizational strategy can be achieved. One of the ways HRM has benefited from using technology is that it has lessened HR staff burden from intermediary roles thereby helping them to focus more on strategic planning in HR organization and development. In as much as the growth of technology is a good development, Brockbank and Beatty (1999) stated that it also has some consequences, one of which is that it may cause a change in the competencies which HR professionals will have to learn in order to succeed. There has been some suggestion that some companies have moved their focus from HR administration to more strategic issues and this change in focus has its consequences on the competencies that brings out the best in a HR professionals.

Technology has brought about change in the way in which the work place is being managed, and has enhanced the improvement of human resource management and employees. Various HR departments strive to lead in the implementation of emerging technologies due to the fact that information technology saves time and expenses once it is well utilized. These HR departments also employ technology to achieve their goals, efficiency and also provide better service to their employees. Brockbank and Ulrich (2003) are of the view that Technology has transformed into a major provision means for HR services, hence the need for HR professionals to portray technological expertise. HR professionals need to be able to use HR technology and web based medium to provide services to employees, they should be skilful with the HR information system and be able to educate others on how to use such system. That's why this research seeks to discover the recent technological changes and how it's impacted HR practice.

1.3 CONCEPTUAL AND THEORITICAL FRAMEWORK

The use of technology in HR management initiates opportunities to re-engineer applications in human capital management and impact operations Chess et al (2007). The ability to impact operations grows from the HR office into every level of the company. Technological

applications provide the most clear application in merging expertise in the area of HR and technology Gasco and Gonzalez (2004). Gasco et al (2004) states that the implementation of most current technology programs makes training and development available to every level of the organisation. The implementation of these will be evident in flexibility in time management for training, trainers' active participation, a high production of quality products and a vivid understanding of the programs. Training programs gives the opportunity to enhance the development of technology aspects for the company in HR applications. The application of foundational leadership theories including administrative theory and motivational theory Scott (2003), provides for company leaders the framework to engage the impacts of technology within the workforce and review the extent of HR participation. The ability to manage change with technological growth allows leaders to compete in markets globally Garg and Singh (2006), Krell (2006) stated that, the 25 years of organisational development in technology from 1980 to 2005 changed the human interaction of the workforce and management into dehumanized execution of button pushing within the organization.

E-HR refers to conducting human resource transactions with the use of internet technology Martinsosns (1996). At its inception, the HR professionals used technology to make accurate and detailed information available to managers and employees, however, its evolvement happened so that it will be possible to deliver almost any HR service with the use of technology Kovach et al (2002).

E-HRM is a process change in companies' structures that combines areas through technological and economical dimensions to meet new consumer needs which in turn leads to a new way of managing people Pagani (2003). E-HR initially came into use in the 90's when E-commerce began to dominate the business world Kovach et al (2002).

Recent technological developments have made business happen at a high speed and a paperless office and also created real time information based, interactive work environment. Thus, technology can be used to support HR main activities across the entire employment cycle from acquiring to rewarding, developing protecting and retaining staff. As technology improves, organizations can use information systems to manage a larger number of HR processes in an increasingly effective manner to contribute to the availability of

strategically significant information and knowledge, thereby potentially improving competitive advantage Panayotopoulou et al (2005). The current research study will thereby examine the evolution of HR technology and help us to understand the connection between HRM and IT. It shall also be important to expound on the comparisons between traditional and E HR.

1.4 PROBLEM STATEMENT

Technological applications and programs has an impact on how HR professionals perceive the effectiveness of performance, productivity and personal involvement with the work force. The society and economic influences of changing technology has expanded organization's production capability for 24 hours a day operations in virtual environments involving limited interaction Efendioglu (2007). The application of self-managing resources through technological procedures reflects opportunities for performance modification and restructuring Chess and White (2007).

Organizational internet and intranet access capabilities influence a HR professional's personal value to the workforce and the influence of competitive edge for the company Alleyne and Kakabadse (2007). Bell et al (2006) identified the reduction of human contact in the use of application icons to answer questions, the removal of human interaction with personal actions of online banking, pay and go gas stations etc. reflect the advancement of personal technology. Professional actions of posting resume online, application of vacant positions online, human service-less flight reservations portrays the advancement of professional dehumanized technology Lee (2007). All of the above examples goes a long way to show the removal of HR interaction and processing of actions. The primary levels of personal needs and human involvement identified in Maslow's hierarchy of needs are reduced through technological means Ruel (2004). This is a major challenge of using HR technology which this research addresses. Urwiler and Frolick (2008), identified a metaphor using Maslow's hierarchy involving an information technology value hierarchy, which reflects the reduction of personal involvement by HR professionals.

It is apparent that HR practices are changing as technological applications are becoming more readily available for human resource management. A clear understanding of how the use of HR technologies within the company affects the work of HR professionals, is needed

to establish the attitude of these individuals towards the tools as they are seen as primary users, this is one of the objectives for this research. Whilst there are lots of research regarding the implementation and effectiveness of technological HR, Ruël and Bondarouk (2006), Zhang and Wan (2006), there are few studies that investigate the technological changes in HR practice and also the impact it may have on the work of HR professionals. There are two studies which were identified to have dealt specifically with the attitude regarding HR technology which were conducted by Kinnie and Arthurs (1996) and later by Voerman and Van Veldhoven (2007).

From the foregoing, this study, would address the issues identified in the research problem with a view to recommending appropriate solutions.

The main thrust of this research therefore is to contribute to the broader research community by generating new knowledge and be able to enhance existing knowledge as it relates to the recent technological changes in HRM practice. It is also to identify the HR practices in Headhunt int. and the technological tools which they use to carry out HR activities. The results of this study would be beneficial for the company as they will be able to identify recent technological tools which they are yet to employ which will support the company in maximizing their operating performance. Another aim of this research concerns the sharing of learning about technological HR which the company can use to raise awareness to possible stumbling blocks and impacts which outdated or technology may cause.

1.5 RESEARCH AIMS AND OBJECTIVES

This dissertation aims to make an assessment of the recent technological changes and the impact of such changes in Human Resources management. In order to realise the objectives of this research, emphasis is made on one of Ireland's leading recruitment advisor, whom will be referred to as 'HEADHUNT INT' or 'COMPANY' or 'ORGANISATION' throughout the dissertation. The dissertation examined the operations of Headhunt Intl as regards its technological capabilities and how it has been able to have an edge higher than its competitors by utilising internal and external IT capabilities. It is also the aim of this research to provide a clearer picture of the Employee and Employer participation to E-HR. Challenges

encountered as a result of using technology in HR administration would be identified while an attempt to proffer solutions to those challenges would be made accordingly.

From the foregoing, four main objectives constituting the crux of this study can be deduced as follows;

- To examine the evolution of the HR technology.
- To examine the HR practices in Headhunt Intl. and the technological tools used.
- To understand the relationship between HRM and IT.
- To make a comparative analysis between traditional and E-HR.

1.6 RESEARCH QUESTIONS

This study will attempt to proffer answers to the questions agitating the minds of HR departments in various organizations as regards adequate employment of new technologies and seeking means to curb the attendant challenges. The main research question that will be addressed is whether or not the use of technology in HRM has been able to effectively reduce administrative burden, and whether the use of HR technologies such as E-recruiting, E-selection, E-learning, E-performance management, E-compensation, E-benefits, etc. has been able to ease the burden of administration in those organisations.

The project will answer the following hypothetical questions that can assist in arriving at the findings and conclusion of the study:

1. Has the use of technology in HRM been able to effectively eradicate administrative burden?
2. What are the challenges encountered as a result of using technology in HR administration?

Finally, the research would also identify the challenges encountered as a result of using technology in HR administration. The research would also attempt to proffer solutions to those challenges.

1.7 SIGNIFICANCE OF THE STUDY

The research will be of great importance to various groups of people such as the current researcher, future researchers, policy makers and the various HR departments in various organisations. The research will be of great importance to the current researcher because of the knowledge and research skills to be acquired which would be subsequently applied to conduct research in other subjects. Skills like developing questionnaires, interacting with people, getting the necessary information and analysing data are skills that can only be acquired through participatory research.

It is believed that the findings in this research will also help the management of Headhunt Intl. to discover other new technologies which they could employ in carrying out HR duties. This will help them come up with better HR techniques, which will translate into improved employee performance.

When an organisation decides to implement a HR technology platform, the first justification is focused on reducing costs, and then a project team tries to identify administrative costs that the new technology can eliminate. The study will therefore assist various HR firms in reducing administrative costs through the application of HR technology.

The research will also benefit the future researchers who will conduct research on the same or similar topic and will learn more about the use of technology in HR practice. The study will also benefit outsourcing companies who mainly carry out employment processes to appreciate the use of technology in executing their functions.

1.8 ASSUMPTIONS, LIMITATIONS AND DELIMITATIONS OF THE STUDY

A major assumption of this study is that all participants would answer the survey questions truthfully. Another assumption is that the questionnaires are simple and could be completed in few minutes. It is therefore assumed that a significant number of those surveyed would respond accordingly.

There are notable limitations to this study. The research conducted for this dissertation was obtained by using a single company and adapted the case study approach for the purposes of data collection. The dissertation looks at the recent technological changes that has impacted the company (Headhunt int.)

This research may therefore not have a concise picture of recent technological changes across companies as the research conducted may differ from the opinions of staff working in other disciplines; therefore, caution is urged. The participants in this research had different working arrangement, roles, levels and supervisory duties, which became hard in distributing the questionnaires and getting them back. One area of constraint was the difficulty for some employees in reading and understanding the questions posed in the questionnaire. Similarly, there is a great possibility that participants in the questionnaires might not feel free to express their true feelings regarding the organization because of fear of victimization or discrimination irrespective of them having been assured of anonymity and confidentiality.

The delimitation of this study is that the respondents are employees of the company hence; a potential limiting factor is that employees may fail to recognize the importance of this research. This study examined some of the technological tools used by some of the employees in Headhunt int., however if it looks at a larger population the results might differ from the result been analysed. Lastly, this study did not consider whether or not these technological tools were in place in Headhunt int. as it was assumed that some of these tools were in place.

1.9 CONCEPTUAL CLARIFICATION OF KEY TERMS

This deals with the conceptual clarification of key terms. It is a definition and examination of some key terms which have been severally mentioned in the text. The nature, meaning and in some cases application of those key terms are examined.

For the purposes of this study, the following words and phrases are defined as follows:

(i) Human resource management: This has defined as a strategic and coherent approach to the management of an organization's most valued assets – the people working there who individually and collectively contribute to the achievement of its objectives. Michael (2006).

(ii) HR technology: can be defined as any technology which is used to attract, hire, retain, and maintain human resources, support HR administration, and optimize HRM. This technology can used in different types of human resource information systems (HRIS) and

by various stakeholders, such as managers, employees, and HR professionals. Julie et al (2010).

(iii) Human Resources Information systems (HRIS): This is an integrated systems used to gather, store, and analyse information regarding an organization's human resources. Using HRIS technology can help HR automate and simplify tasks, reduce administration and record keeping, and provide management with HR-related information when required. Julie et al (2010).

(iv) E-Technology: E-Technology refers to all devices and programs involving electronic technology available to the organization and workforce, such as cell phones, blackberries, personal data computers (PDC), answering machines, caller identification programs, laptops, notebooks, video-teleconferencing, and internet communications Newstrom and Davis 2002).

(v) E-HR: Electronic Human Resources (E-HR) include the HR programs designed to do more with less physical interaction Richards (2006). 'Online' applications and processing provide the completion of work through an electronic means.

1.10 ORGANISATIONAL LAYOUT

This book is divided into six chapters. The first chapter deals with the general introduction of the subject matter of the research while considering the background and problem of the study as well as the aims and objectives and the significance of undertaking this research.

In chapter two, a brief literature review is made of some works relating to the field of this study. The chapter considers current literature available on HR technology and their relevance to HR Management. It also brings into light the recent technological changes in HR that enhance work in the work place. This review is accompanied by objective comments and opinion of these works.

Under chapter three a discourse is made on the research methodology employed and how the data obtained is utilised to achieve the findings in this work. .

Chapter four deals with a summary of the results of the study, detailing the main findings and their relationship to the research objectives and questions. Findings in this project are presented in bar charts and frequency tables.

Chapter five comprehensively analyses the findings and draws conclusions from the data gathered. Most importantly, based on the findings, recommendations are made for the consideration and possible use of Headhunt int.

Chapter six which is the concluding chapter, presents reflections and experiences of the writer during the course of undertaking this study. It covers the impact and importance of carrying out this research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a review on the concept of HR technology that exist in the literatures. Many researchers have carried out study on the topic of HR technology among organizations. The chapter consist of various sub headings regarding the concept of HR technology. This chapter therefore intends to examine the technological changes in the area of HRM, while taking us through the evolution of HR technology, in order to make us understand how HR technology all came about. This review is carried out in order to seek knowledge and insight into some works relating to the field of this study in order to understand the main research question.

2.2 THE EVOLUTION OF HR TECHNOLOGY

HR systems were initially paper based, the system operated solely on its own and did not combine with any other related function. Various attributes were added as needed. Data stored mainly on mainframe computers and the reporting was mostly elementary, and Human resource was the primary custodian of the data. Managers would usually send employees to HR to get all their personnel questions answered Julie (2010)

The next stage had a migration of information resident in the paper based systems to PCs and local area network (LAN) systems. The HR databases could produce reports that simply listed “tombstone” data, which meant basic employee information. The advances in the database technology included payroll and some very basic versions of employee tracking. HR data were mostly stored on a client server, a network architecture in which each computer on the network is either a client or a server. Servers are powerful computers that are dedicated to managing disk drives or network traffic, while clients are PCs which users like HR professionals run software applications. The clients depend on the servers for resources like files and devices like printers, and also processing power Russell (2003).

This early stage was being dominated by Peterborough software and Midland software among others. Mainframe computers were important assets in organizations and were

being managed in a thorough and centralised manner Russell (2003). They provided a minor flexibility which made the process of making changes difficult.

The emergence of desktop PCs in the 80's made it possible for the availability of cheap and flexible PC based HR applications which were not difficult to install and provided a variety of reporting tools and functionality. The HR users then were introduced to the possibility of overseeing their numerous administrative task using a desktop system which could not be done using a mainframe system Ralston et al (1998). The arrival of web-based technologies and client server architectures brought about change in the range of activities placed on Pcs and has opened the possibility to manage HR processes at the local level through employee and manager self - service. Ralston et al (1998) defined client server as a term which refers to a network architecture where there's a separation of the system which interacts with the end user i.e. the client from the system that manages the bulk of heavy work lifting i.e. the server. The advantage of an architecture in this context is that it permits each machine in the network to perform their various task, with substantial servers managing the software application and database while the desktop PCs are taking care of the presentation of data to the end user. The client server approach permits a potentially unlimited number of users to be able to access and manage the same data from various points on the network. For HR, these architecture promised to rectify a lot of setbacks of previous generations of HR technology by making available connectivity, between hardware platforms and ensuring that users had access to the system they needed Allan et al (2008).

At this point, HR entered fully into the digital world of electronic HR and the term "E-HR" began to appear, many organisations has also begin to embrace HR technology. There are now relational database where data can be stored in more than a file, with each file containing different types of data. Users can now access applications from any computer connected to the Internet via a secure, password-protected login page and from that point forward all the data are encrypted. Various HR department continue to be the owner and custodian of HR information, the reports that HR is able to produce have become more sophisticated, even though majority of systems are still not Web-based, some leading-edge organizations have embraced this technology Julie (2010).

2.3 THE CONCEPT OF HRM AND HR TECHNOLOGY

Human resource management is said to be a strategic and logical approach to management, and also the management of the most valued assets of an organisation Michael (2006). Byars and Rue (2006) construed Human Resource Management to be a system of various activities and strategies which concentrate on managing employees very well from various levels of an organisation so that it can achieve organisational goals. Employees are the human resource of every organisation and its most valued assets. It can be observed from the definitions of the researchers that the employees of an organisation are perceived as the companies most valued assets.

According to Dessler and Cole (2011), HR Technology is any technology that can be used to hire, retain and maintain HR and also used to support HR administration. HR technology can be used in different types of HR information systems and also by employees, managers, and HR professionals. It has created an easier and faster means of gathering, delivering of information and communicating with employees, it's also capable of reducing administrative burden on various HR departments. Organisations who use technology to manage their HR functions are of more advantage than those who do not, even though not all organisations are in possession of the latest technology but, a high number of them have HR related information needs.

The application of information Technology (IT) to HRM is known to change the function, while also allowing technology to develop its full potential Hempel (2004). E-HRM was used first in the 1990's and refers to completing HRM transactions making use of the internet or intranet Lengnick-Hall and Moritz (2003). In a recent research on E-HRM, the term E-HRM was seen as an umbrella term covering every possible integration mechanisms and content between HRM and IT which is aimed at creating value for specific employees and managers - Bondarouk and Ruel (2009). Strohmeier and Kabst (2009), are of the view that adoption refers to the process of initiating and implementing IT so as to offer support to various actors in performing HR duties, therefore, the organisational adoption of E-HRM represents the decision to implement and apply information and communication technology for HR purposes.

The phrase E-HRM has been argued to be interchangeably used with Human Resource Information System (HRIS), virtual HRM, Web based HRM and intranet based HRM (Bandarouk and Ruel (2009). Strohmeier (2007), are of the view that in the use of the term E-HRM, researchers mostly refer to all types of IT applications used for HRM function, based on the assumption that there are no distinctions between HRIS and Web based HRM applications (E-HRM).

Strohmeier (2007) among other researchers proposed a distinction into different relevant technological categories, irrespective of the fact that some of them are being used concurrently to make technological basis of E-HRM available, he adopts the difference between front-end and back-end systems of E-HRM. Front-end are usually web-based with a primary task of connecting to different actors such as HR portals, self-service systems or interactive voice response systems, which are being considered as the main categories of E-HRM. The front-end systems require the support of various back-end systems such as HR data ware-houses or HR modules of enterprise resource planning systems used for storing, processing and retrieving data. HRIS is also seen as the backbone technology of E-HRM (Hendrickson (2003).

2.4 THE CONNECTION BETWEEN HR AND TECHNOLOGY

Studies such as Carmen and Ana (2010), have shown that as a result of new technologies being introduced, and the connection it has with the work force, it has been reviewed to a large extent in academic literature at the organisational level, and has led the concept of Skilled Biased Technical Change (SBTC). SBTC explains how the initiation of new technologies brings about bias among unskilled workers and thus creates a demand for increase in skilled workers because the skilled workers are needed for the effective use of new technologies. Qualified workers will be favoured more, if the new skills are costly to acquire than those required to operate old machinery, while the unskilled will only be favoured if the new skills can be acquired at a cheaper rate than the skills linked to pre-existing technologies.

If every organisation is to introduce ICT, unskilled workers will be affected but the skilled will compliment innovation and ICT even though there has been a higher demand for skilled workers in the last decade. SBTC assumes that new technology compliments and not necessarily replaces skilled labour. Resources are complimentary if their use jointly

improves the value of themselves, and therefore it can be said that human resources and ICT resources are complimentary. The use of one of these resources in an organisation will consequently show the readiness for the use of the other.

There has been a demand on HRM to reinforce strategic goals and to concentrate on value adding task, which will eventually lead to a change in job content and the expectation on HR professionals. Shrivastava et al (2004), identified one of such changes to be the wide modern day use of IT to aid different HR activities. Besides, researchers anticipate that the large use of HR technology can enhance the performance of HR professionals and get them involved in organisational activities.

2.5 TECHNOLOGY AND THE HR FUNCTION

Sagie and Weisberg (2001), in their research about the HR function in organisations in Israel, discovered that the technological levels in HR departments have been split into two different parts, which is the high-tech sector, which involves strategic concerns and the low-tech sector, which has to do with traditional activities. Gardner et al (2003) argued that for technology to be applied into the HR activities, it has to be done through the web-based application, pointing out information publishing as the simplest and easiest means of implementing human resource technology. It was also stressed that a higher level of applying Human resource technology, is said to be automation which involves the use of technology to administer the workforce data. HR Technology is known to use both intranets and internet at this level and HR Technology automation can lessen the quantity of work procedure like business record maintenance which prior to this time would have been done manually by HR professionals. Employees can upgrade their information themselves and HR professionals can now be free from activities, which are time consuming and concentrate more on interpreting information Gardner et al (2003).

2.5.1 LINKING TECHNOLOGY WITH HR

There has been effects of IT on HRM, and this effects have continued to increase over the years even though the application of IT on HRM has been long developed Florkowski (2006). Hempel (2004), came up with a model which shows the link between technology and HRM and it include an organisation's design and work, the HR professionals and employees. The model indicates that a recent technology development can bring about changes in

reengineering the organisation and work design, and these changes can disrupt the outcome of HR practices. HR professionals are said to gain powerful technologies to boost changes within the organisation by managing the innovative and skilled employees and it can be said from this point of view that the link between technology and HR is a kind of interaction.

In looking at the impact of human resource technology on human resource daily activities, Stone et al (2006), examined HR technology from its functions such as e-recruiting system, e-selection system, e-performance system, and e-compensation system, and pointed out that HR technology can have both positive and negative influences on HR. By exploring these functions, the understanding of HR Technology influence on the evolution of HR, can emanate from social interaction pattern, perceived control of individuals and system acceptance Ashbaugh and Miranda (2002).

2.5.2 INFORMATION FLOWS

The administration of HRT can alter the flow of information, due to the fact that the system help users to effectively collect, disseminate and access information. For example, recruiting without the face to face interview and enquiry. HRT can enhance the collection of applicants' information about jobs and access to HR professionals. HRT can also give regular feedback to employees and improve organisation's ability to support employees. Even though HRT has enhanced an organisation's ability to collect data and manage employees, it still has some limitations like e-performance, where management might not have the ability to quantify every employee behaviour Stone et al (2006). Which is why Haines and Lafleur (2008) stressed that the system can only quantify and not quality, as a result, HRT permits HR professionals to manage a lot of information with great care. HRT automation is believed to be the best means of improving productivity and it contribute greatly to HR.

2.5.3 SOCIAL INTERACTIONS

HRT makes face to face interaction less in organisations, because people can get connected via the internet by means of internal email and telecommuting, and as such work can be done without the location constrain e.g. working at home or in an international company. It can be said that HRT widens the interaction between the employees in an organisation, but it also has its short coming, due to the reduction in face to face interactions, HRT may

negatively affect trust among employers and employees Stone et al (2006). Researchers such as, Ashbaugh and Miranda (2002), stated that Human resource technology has transformed traditional HR and management. It has made it possible for work to be simplified, measure activities, provide instant feedback and reduce the waste of time.

2.5.4 IMPLIMENTATION OF NEW TECHNOLOGIES

For some years now, as a result of recent technological changes in HR, Human resource technology buyers, have selected and contracted for human capital management software. The expanding marketplace pits Workday against Oracle and Cloud. The latest innovations in human resource technology and service delivery present organizations with the opportunity to reimagine the employee, manager and executive experience in ways that increase user productivity, engagement and adoption. Organizations that are looking to transform their HR service delivery should begin planning now to replace their human resource point solutions with a unified, cloud based human capital management (HCM), solution supported by a contemporary HR service delivery model that is designed to deliver a consistent global employee experience. The use of human resource information system to delegate HR activities and data maintenance to employees will perform greater than those making use of HRSI mainly as HR reporting tool. A lot of organisations are investing more in technologies that provide higher near term innovation and advances in delivery of service. They are exploring the possibility of new offerings on the horizon, even though some of these companies are not waiting to see if these new technologies will deliver on their promise. So many respondents plan to implement social, mobile, analytics, and other HR technology solutions in the coming years. Organisations that have adopted these technologies are satisfied with positive results Maribeth and Debora (2014).

2.6 TRANSITION FROM HR TO VIRTUAL TECHNOLOGY

In today's world, organizations increasingly conduct business in a virtual workspace, whether their employees are located in different countries, cities or venues in the same city. The virtual workspace can be defined as an environment where employees work away from company premises and communicate with their respective work places via telephone or computer devices. The virtual organization has different or greater challenges than the traditional face to face workplace environment, with lines of work crossing over

geographies, markets, countries and cultures, alliances, partnerships, and supplier networks Nancy and Lockwood (2010). Wayne (2000), Pointed out two challenges faced by managers, the first coming from the physical separation of workers, enquiring how managers will manage their employees if they can't see them, the second is to overcome uncertainty about whether or not managers will still be valued by companies, as they manage employees who are physically absent.

Most organisations have been providing virtual HR services for some years now, and this is done to meet the needs of the dispersed workforce while holding down cost. This mostly comprise leveraging virtual technologies to outsource payroll, benefits administration, and even human-capital management. Leading organisations are now taking virtual HR to a different level, far beyond the traditional support type services to include the use of virtual HR tools and techniques in functional areas that are more core to HR's mission, and it falls into two basic category such as, recruiting and on-boarding Mike (2014)

2.6.1 VIRTUAL RECRUITING

Much has been said about how technology allows organizations to expand their talent by seeking out talent where it lives. Yet discovering that talent is often still a matter of traveling from region to region to set up live events i.e. job fairs and speaking with whoever can make it to that event that day. A virtual job fair turns that model around completely. Rather than remaining fixed on a location and a specific time frame, organizations can set up a virtual environment for recruiting that operates 24/7/365. It's extraordinarily convenient for prospective job candidates as well, because they can enter the virtual job fair from anywhere with the availability of the internet. It eradicates the limitation of time and distance, creating a truly worldwide pool of talent from which to draw. With a virtual job fair, organizations can use webcasts, webinars, and video to interact with job candidates, and employee prospects around the world Mike (2014).

2.6.2 VIRTUAL ON-BOARDING

Scheduling a traditional orientation in a room filled with new hires is a fading practice. When most of your talent is distributed across broad geographic locations, the cost to fly in new hires from around the world and put them up in a hotel for several days or fly company executives to a location for local on-boarding becomes astronomical. It makes far more

economic sense to conduct these sessions virtually. Virtual on-boarding makes it easy and far less expensive to on-board a global workforce. There is no travel involved, so no need to worry about passports, flight delays, or other factors that can affect attendance. On-boarding sessions can be scheduled in a way that makes sense from an organizational standpoint as well. Rather than focusing on all new hires in a region for a particular session, new employees can be grouped by job function, language, experience, or any other criteria that is deemed important. And unlike in-person, on-boarding sessions are restricted to a particular time frame, all of the presentations and activities can be captured and stored online so new hires can refer back to them from time to time as needed Mike (2014).

2.7 THE USE OF HRIS IN ORGANIZATIONS

Human Resource Information Systems (HRIS) is a process that utilizes information technology for the effective management of HR functions and applications, it's a computerized system which is mostly made up of database that track employee's specific information Gill and Johnson (2010).

In this present context of globalisation, various organizations have become more complex, their managers often face difficulties in coping with the workforce which may spread across various cultures, countries, and political systems. Given such tendency, manual HR systems management is totally inappropriate Beckers and Bast (2002). HR Information system is a tool which managers can employ in general and in human resource functions so as to increase the capabilities of the organisation Tansley and Watson (2000). Those managing the HR function have not ignored such potential and so there has been a large spread use of HRIS as seen in the table below.

Administrative	Worldwide average	Agriculture, mining, construction	Financial services	Health care	Higher educated	High tech. manufacturing	Consumer/ other manufacturing	Other services	Public administration	Retail/wholesale	Transport/public utility
	92%	88%	92%	94%	87%	95%	93%	87%	91%	92%	93%

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Service delivery	46%	41%	60%	43%	38%	45%	29%	55%	41%	49%	55%
Workforce management	43%	31%	40%	48%	30%	33%	41%	52%	27%	48%	46%
Strategic talent management	42%	29%	43%	44%	41%	42%	42%	45%	33%	46%	44%
Business intelligence	34%	32%	33%	30%	38%	29%	21%	28%	31%	26%	37%

HRIS adoption by industries Ceder (2009)

From the table above, it's obvious that HRIS has spread across various sectors, Hussain et al (2007) observed that for senior HR professionals, the strategic use of HRIS is increasingly the norm irrespective of company size and this had led to the HR profession providing value for the organization.

Snell et al (2002), is of the opinion that HR can meet the challenge of simultaneously becoming more flexible, cost efficient and customer oriented by leveraging information technology. They stressed that IT has the capability of lowering administrative cost, increase speed, productivity, improve decision making and enhance customer service all at once. Yeung and Brockband (1995), stated that the need for cost reduction, higher service quality and a change in culture are the primary forces that lead firms to seek after IT driven HR solutions. The fast growth of IT during the last two decades boosted the implementation and allocation of electronic human resource management (E-HRM) Strohmeier (2007). Studies of HR consultants advocate that the number of companies acquiring HRIS and the extent of its application within the organizations are frequently on the increase CedarCrestone (2005).

2.7.1 COMPONENTS OF HRIS

HRIS has three functional components as seen below.



1. INPUT: The input function creates capabilities needed to get HR data into the HRIS. It enters personnel information into the HRIS. First of all, procedures and processes are being required to gather necessary data, once collected, the data will have to be entered into the system. Edit tables could be used to ascertain if the data are acceptable. These tables contain approved values against which the data are checked automatically. The system should have the capability to update and change the edit tables.
2. DATA MAINTNANCE: This is responsible for actually updating the data stored in the various storage devices. As changes occur in human resource information, this information should be incorporated into the system. As new data are brought into the system, it is important to maintain the old data in the form of historical information. It updates and adds new data to the data base after data have been entered into the HRIS.
3. OUTPUT: This component of HRIS is the most visible one because the majority of HRIS uses are not involved with editing, collecting and updating human resource data, rather they are concerned with information and reports to be used by the systems. To be able to generate valuable output for computer users HRIS processes output, makes necessary calculations and format the presentation Nisha (2012).

2.7.2 BENEFITS OF HRIS

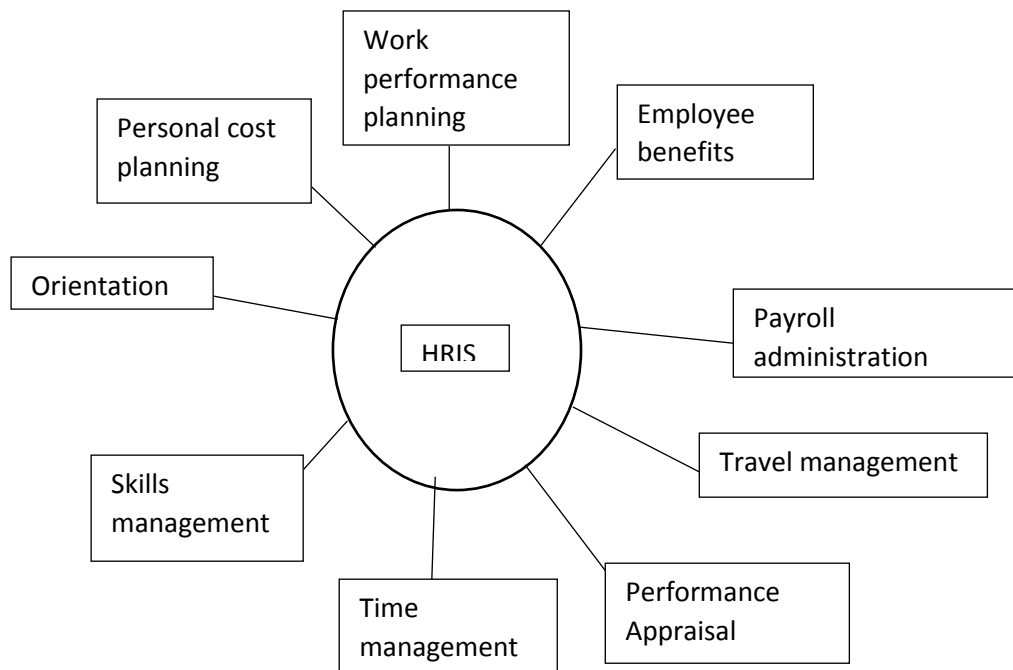
Human resource information system helps in recording and analysing employees and organization information and document like employee handbook, emergency evacuation and safety procedures Fletcher (2005). It is also useful to companies in keeping accurate and updated data base that can be retrieved from reports and manuals.

Beckers and Bsat (2002), stated out reasons why organisations should use HRIS. They are;

1. HRIS increase competitiveness by improving HR practices.
2. It produces a greater number and variety of HR operations.
3. The focus of HR is shifted from the processing of transactions to strategic HR.
4. It makes employees to be part of it (HRIS).
5. Re-engineering the entire HR department.

6. Improvement of employee satisfaction.
7. Greater information accuracy.
8. Timely response to queries.
9. Reduced manpower cost.
10. Reduced workload by minimizing repetitive administrative tasks like acquiring, storing, upgrading and manipulation of large volumes of information.

Krishna and Bhaskar (2011), also summarized the benefits of HRIS as shown below;



2.8 COMPARISON BETWEEN TRADITIONAL AND E-HR

There’s been a shift from traditional HR which focused on the operation of HRM functions with paper based manual processes to E-HRM which emphasizes more on strategic, integrated and automatic approaches based on technology to increase the efficiency and effectiveness of HRM. Below is a comparison of the two phases of HRM which are traditional and E-HR Lengnick et al (2003).

HR PRIMARY PROCESSES	TRADITIONAL HR	E-HR

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<p>Acquiring human resources Recruitment and selection.</p>	<ul style="list-style-type: none"> - Paper resume and paper posting. - Positions filled in months. - Limited by geographical barriers. - Cost directed at attraction. - Manual review of resumes. 	<ul style="list-style-type: none"> - Electronic resumes and internet postings. - Position filled in weeks or days. - Unlimited access to global applicants. - Cost directed at selection. - Electronic review of resumes (scanning) - Some distance interviewing
<p>Rewarding human resources. Performance evaluation.</p>	<ul style="list-style-type: none"> - Supervisor evaluation. - Face to face appraisal. 	<ul style="list-style-type: none"> - 360 degree evaluation. - Appraisal software (online and hard copy)
<p>Compensation and benefit.</p>	<ul style="list-style-type: none"> - Time spent on paperwork (time changes). - Emphases on salaries and bonuses. - Naïve employees. - Emphases on internal equity. - Changes made by HR. 	<ul style="list-style-type: none"> - Time spent on accessing market salaries. - Emphases on ownership and quality of life. - Knowledgeable employees. - Emphases on external equity. - Changes made by employees online.
<p>Developing Human resources training and development. Career management.</p>	<ul style="list-style-type: none"> - Standardized classroom training. - Development process is HR driven. - HR lays out career path for employees. - Reactive decisions. - Personal networking (local area only). 	<ul style="list-style-type: none"> - Flexible online training. - Development process is employee driven. - Employees manage their careers with HR. - Proactive planning with technology. - Electronic and personal networking.
<p>Protecting human resources. Health and safety. Employee relations/legal.</p>	<ul style="list-style-type: none"> - Building and equipment safety. - Physical fatigue. - Mostly reactive programs. - Limited to job related stressors. 	<ul style="list-style-type: none"> - Ergonomic considerations. - Mental fatigue and wellness. - Proactive programs to reduce stress. - Personal and job

	<ul style="list-style-type: none"> - Focus on employee management relations. - Stronger union presence. - Equal employment opportunity. - Sexual harassment/discrimination. - Task performance monitoring. 	<ul style="list-style-type: none"> related stressors. - Focus on employee – employee relations. - Weaker union presence. - Intellectual property/data security. - Inappropriate uses of technology.
Retaining Human resources. Retention strategies.	<ul style="list-style-type: none"> - Not a major focal point. 	<ul style="list-style-type: none"> - Currently the critical HR activity - Online employee option survey. - Cultivating an effective company culture. - Mundane task done by technology, freeing time for more interesting work. - Development and monitoring of programs.
Work family balance.	<ul style="list-style-type: none"> - Not a major focal point. 	<ul style="list-style-type: none"> - Proving childcare and eldercare. - Erosion of work and home boundaries.

Ellen et al (2002)

2.9 CONSEQUENCES OF HR TECHNOLOGY

The consequences of E-HRM is a recent development in the field of HR technology Ruel et al (2012). Strohmeier (2007) was of the opinion that findings related to the challenges of HR technology seem to be contradictory. These findings tend to generally backup the claim that introducing HR technology does not mean a change in the organisation’s HRM settings only, but it is also important to understand the effects of HR technology. Strohmeier (2009) recommends that companies should put in more effort in managing the challenges facing E-HR persistently, initial vigilance can reduce the risk of falling into accidental changes. There’s been a lot of research on the positive sides and benefits of HR technology. However it has been noticed with time that there are negative sides, especially where change management

and technology acceptance is yet to be considered Martin and Reddington (2010). Fisher and Howell (2004) came up with intended and unintended reactions to HR technology.

Outcomes	Intended reactions	Unintended reactions
Affective outcome	<ul style="list-style-type: none"> - Satisfaction - Enthusiasm - Attitude towards the system - Self-efficacy 	<ul style="list-style-type: none"> - Dissatisfaction - Cynicism - Frustration
Cognitive outcome	<ul style="list-style-type: none"> - Knowledge of how to use the system - Perceived usefulness - Perceived control 	<ul style="list-style-type: none"> - Spill over effects (positive or negative) - Interpretation of corporate values and goals
Behavioural outcomes	<ul style="list-style-type: none"> - Use of the system - Increased productivity 	<ul style="list-style-type: none"> - Resistance - Decreased productivity - Sabotage - Turnover - Knowledge sharing

Fisher and Howell (2004)

Martin and Reddington (2010) went ahead to summarise the outcomes of HR technology based on academic literatures which is different from that of Fisher and Howell (2004), in that they have been grouped into two (intended and unintended outcomes which is based on positive-negative and transactional and transformational categories. This outcomes are valuable to practitioners when looked at from an organizational angle.

The outcomes of HR technology

	Positive	Negative
Intended	Transactional <ul style="list-style-type: none"> - Reduced costs of HR transactions and HR head count reduction - Greater responsiveness to needs of managers and employees' needs for real time information and tailored HR solutions on demand. - Increased self-efficacy among managers and employees 	Transactional <ul style="list-style-type: none"> - Reduction in HR headcount
	Transformational	Transformational

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	<ul style="list-style-type: none"> - Greater accountability of managers for people management - Increased acceptance of self-development by employees - Improved talent management through self-selection, self-assessment, performance management etc. - Improved two-way communication leading to higher levels of organizational engagement and satisfaction with HR/people management - Greater access to individual learning - Greater capability to feed forward individual learning into group and organizational learning across distributed organizations - Greater sense of corporate identity through uniform HR portals - More time for HR to focus on expert/strategic issues - Greater ability to work flexibly from home and other work places 	<ul style="list-style-type: none"> - Lack of face-to-face contact and remoteness of HR staff from “clients” - Intellectual property and data ownership transferred to outsourcing partner
Unintended	<p>Transactional</p> <ul style="list-style-type: none"> - Spill over of information from HR into other areas of business 	<p>Transactional</p> <ul style="list-style-type: none"> - Displacement of existing HR staff and loss of organizational knowledge - Lack of job satisfaction among HR staff working in shared services centres - Manager/employee frustration over missing ease of use and value of information - Resistance to new ways of working though “benign neglect”, opposition or mild forms or sabotage - Increased level of cynicism with HR/organizational change programs

		- Increased perception by managers of being responsible for HR's job and work
	Transformational - Greater sense of organizational innovativeness/progress modelled through adoption of sophisticated e-HR	Transformations

Martin and Reddington 2010

2.10 TECHNOLOGICAL TRENDS

HR technology has been influential in changing the HR field. The various changes on the horizon have the potential for an even greater impact in the future. Below are some technological trends to look out for as stated by Richard et al (2012).

1. **THE GROWTH OF SOCIAL NETWORKING:** learning to combine information from social network sites is a potential challenge for HR executives. There is potential benefit alongside problems of privacy and data accuracy. New challenges are coming up as new legislation and applications develop. German politicians have proposed to outlaw the use of social networking information in employment decision making Hofmann (2014).
2. **EXPANSION OF COMPLIANCE AND REPORTING OF REQUIREMENTS:** Various organisations will increasingly need to adjust their HRIS so as to remain compliant with state and federal requirements. Pending changes in tax codes, financial reports and healthcare all propose that compliance and reporting demands will increase with time. It is therefore hard to imagine organizations without strong HRIS effectively navigating this new environment.
3. **MORE RENTING AND LESS BUYING OF SERVICES:** The use of hosted approaches in which organizations rent services and software from vendors is booming. The growth of the web-based systems has helped organizations to consider approaches such as cloud computing and software-as-a-service (SaaS). These approaches can provide benefits especially for smaller organizations that will like to access the capabilities of complex HR systems, but are unable to afford a large system. Cloud computing and SaaS are most likely

to grow in market share and would provide added flexibility to organizations HR technology strategies.

4. **GREATER USE OF BUSINESS INTELLIGENCE:** How to turn HR data into a form that managers can use to measure HR's contributions to organizational profitability is a key challenge for HR professionals. To be able to tackle this issues, organizations will have to use more sophisticated applications to analyse the large amount of data available through HRIS. HR dashboards which offers high-level, real time, graphically formatted data to managers, will become an integral part of the human capital management. In addition, firms will adopt a more sophisticated web-based workforce analytical tools and will push data farther out to managers. This will help managers to make use of the organization's personnel policies and practices to make a better employee-related decisions.

5. **INCREASING HR DATA TRANSPARENCY, INCREASING PRIVACY CONCERNS:** HRIS can make increasing amount of HR data to be more accessible to employees, along with more transparent policies and procedures, but with greater transparency comes greater concerns about privacy. The news reports of data compromises and identity theft comes up almost on a daily basis and few entities manage more personal information than employers, as employers make data easier to access, risk of jeopardizing employees privacy increase. Managing this risk is becoming even more complex as HR applications often link to systems outside the organization e.g. benefit vendors, online job search sites, distant learning providers etc.

2.11 CHALLENGES ASSOCIATED WITH HR TECHNOLOGY

The field of HR technology has made a paradigm shift towards the reduction of cost and efficiency along with a lot of opportunities as well as challenges, HR technology has and is still encountering a lot of challenges, but Megha (2014) stated some of these HR technology challenges, which shall be considered in this section.

1. **COST:** The implementation of a technological based HR system will require a huge amount of investment, but once it's been invested, it reduces the operational costs. Large organisations are often at an advantage as they are able to install HR portals and packages while the smaller organisations are at a disadvantage as they find it difficult to afford them, because they lack the financial resources to do so.

2. ACCEPTANCE: Before the application of technological innovation in an organisation, HR is itself a big barrier. As a result of technology being implemented, various issues like skills and knowledge for its use, risk of employment often arise in its way. The workforce needs to be accepted in order to utilize it up to the fullest. Information and communication technology (ICT) is spread widely and has become an integral part of almost all jobs occupied by knowledge workers Porter and Kakabadse (2006). It tend to increase the burden of employees by spending more time connected.

3. BACK-UPS AND SECURITY CONCERNS: It requires sustaining a fully-fledged back-up system of the overall E-HR system, and thereby leading to the cost of maintenance. A basic downside of using E-HRM is that the data becomes obtainable to all and anybody can access the strategic information and use it in anyway without any form of authorization. It is vulnerable to hacking, corruption and data losses Kaur (2012). Having an open access to the databases destroys the personal information of the employees, which may lead to illegal access.

4. INCREASING ISOLATION: As a result of the formation of a virtual network via the intranet or web based HR portals, there's now much less personal interaction among employees. There used to be a lot of interaction in the traditional HR systems between administration departments regarding their employment issues due to which created a personal connection. With the implementation or HR technology, the employees does not need to go into the administration branch regarding any issues, they are being isolated from each other and can only connect via portals only.

5. MORE INFORMED EMPLOYEES: Due to an easy accessible and transparency, the employees are well informed about the market pay structures. This enhances the accessibility of internal and external compensation information. These knowledge may force the company to improve its compensation structures from time to time so as to meet up with the present structures in other companies, even though this may sometimes create problems for the organisation.

6. FASTER MAY NOT MEAN BETTER

HRIS will reduce time and cost per transaction. In addition, HR staff and line employees will have access to a growing volume of data to support decision-making. Although the goal is

more effective decision-making, a typical result is that decision quality does not improve measurably, though time-to-decision is reduced. Another unanticipated impact of the increased use of HR technology in decision-making is that the logic behind the decision can become less transparent. Organizations need to ensure that process and policies embedded in managerial self-service (MSS) applications are clearly explained to the employees they affect. Research has shown that individuals from lower socio-economic backgrounds have less computer experience and less access to computers in their communities. Thus, there is a risk that minorities will be less represented in applicant pools, than they are when using traditional recruiting channels, it's very important that employees poses technological skills.

2.12 SUMMARY

The above chapter gave us an outline on the various literatures in the field of HR technology, it provided the basis for understanding the subject matter.

The importance of HR technology in the day to day performance of employee's duties cannot be overemphasized, especially when it comes to accomplishing a task fast and with ease. It is a well-known fact that organisational task is highly improved by the use of technology. Going by the findings of the literature review, it can be inferred that technological skill is very important in the present organisation and so individuals should acquire the necessary skills required so that they can fit into almost any high organisation. It can also be seen from the review that, HR technology also has its shortcomings, which include the absence of human interaction, which has led to a reduction in HR headcount among others. The next chapter will be talking about the research design and how the study was being approached.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

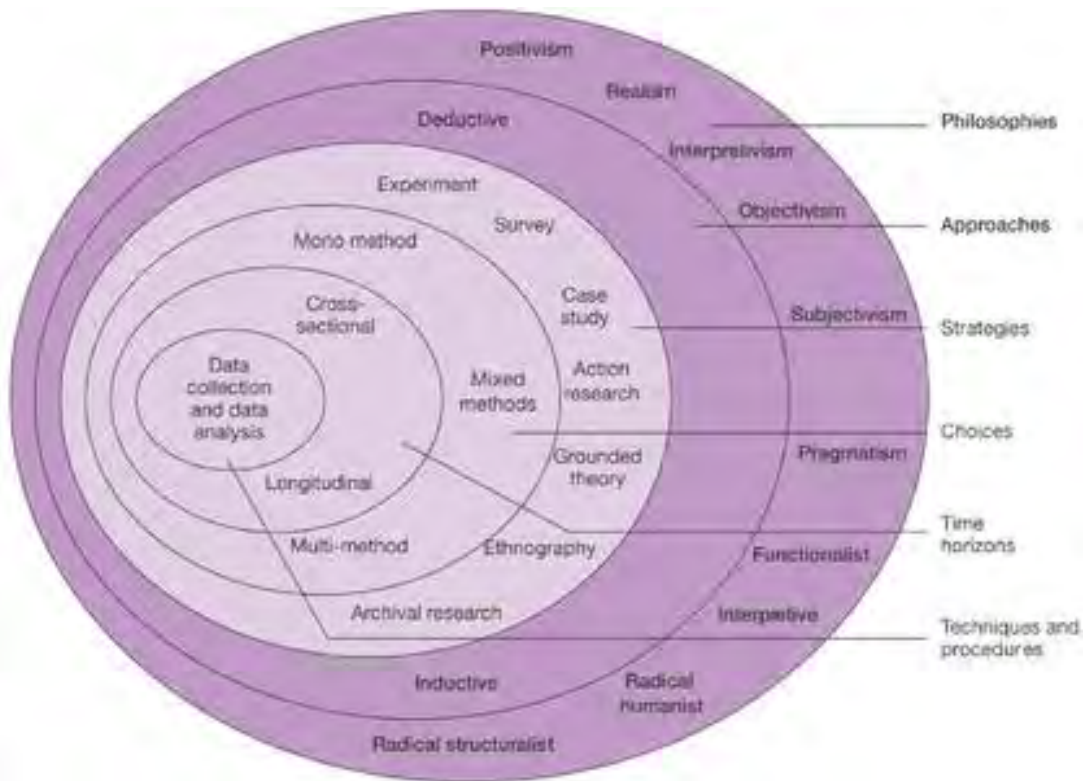
Saunders et al (2009) defined Research as a process, which people undertake so as to find out things in a systematic way, which goes to help in adding to their knowledge. This goes to suggest that research is based on logical associations and not just beliefs. Methodology on the other hand is said to be the manner in which knowledge is being gotten, it involves how theories are generated and tested, and also the relationship between theoretical perspectives and research problem Blaikie (1993).

This chapter deals with the research design methodology. It gives an outline on the approach of the study. This comprise of the type of research philosophy, research design, the measuring instrument (questionnaires), the sampling procedure, and data analysis. The chapter examined the ethical issues that were considered in the course of this study with emphasis on confidentiality, elimination of harm and data protection.

Various factors impact the method by which a researcher chooses to conduct his or her study. This involves the nature of the problem, the researcher's belief, the status of scientific research and theories, if they are in any way applicable to the problem. If the aim of a research is to identify or project features that will be of impact to an outcome, then it's preferable to employ a quantitative approach Brannick and Roche (1997). It is on the basis of this that the quantitative approach is favoured as the preferred methodology for this research.

It is worthy at this juncture to emphasise that the research is aimed at identifying the various technological tools and practices employed in the organisation (i.e. Headhunt Int.). In an attempt to portray a well-defined structure, so as to come up with a more valid outcome, this methodology is being classified using the research onion framework as postulated by Saunders et al (2009) (See Figure below).

The Research Onion Framework (Saunders et al (2009) have been modified in order to demonstrate the chosen methodology for this research.



3.2 RESEARCH DESIGN

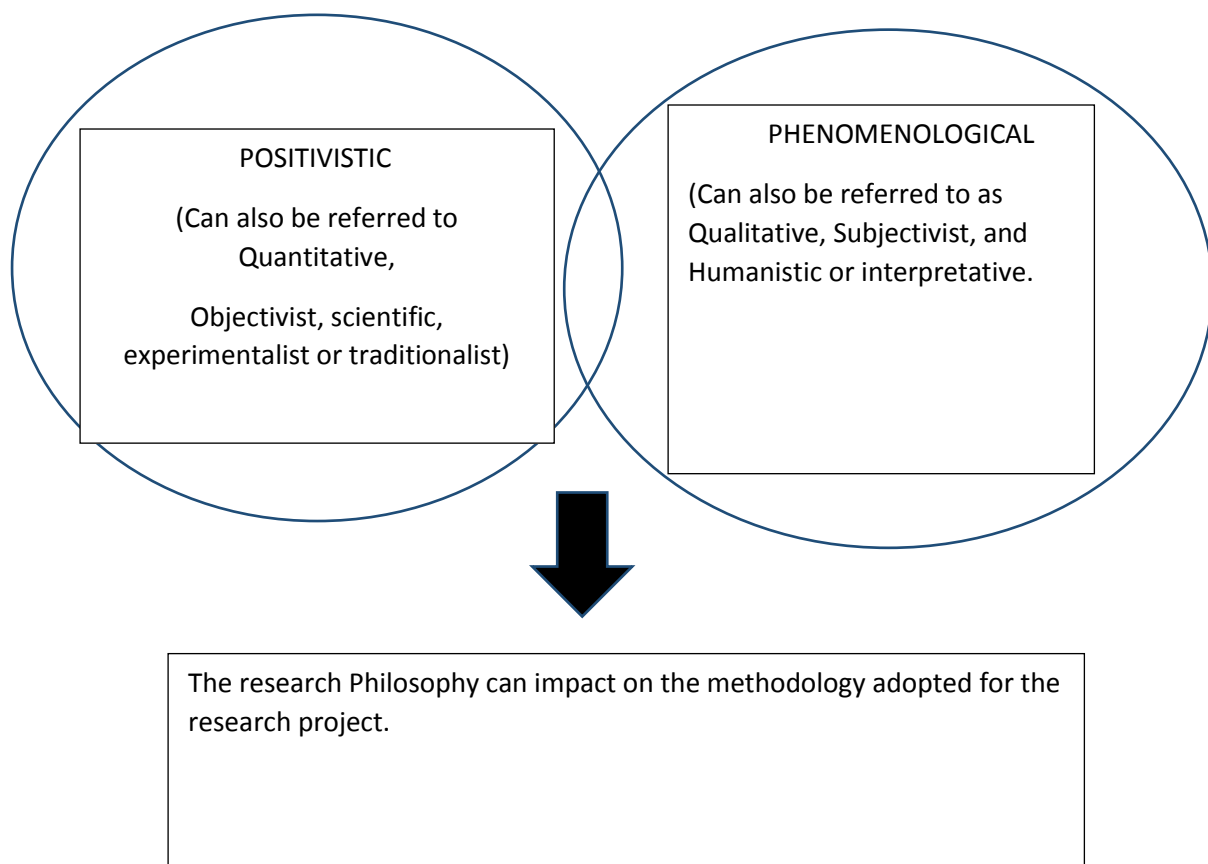
The research onion is a road map that has been developed to plan and set out the research process. The onion is a guide with various steps which aims at turning a research question into a full project Robson (2002). The introductory layer, which is the first layer, is the research philosophy. The research philosophy gives a better understanding on the researcher's perception. The next layer is the research approach which gives clarity as to the approach taken by the researcher which could either be deductive or inductive approach. A deductive approach is a situation whereby hypothesis are made and tested from literature reviews and analysis, while inductive approach is a situation where the researcher collects data and then goes ahead to develop a theory out of that data which should have been analysed. The research strategy is the third layer, and it supports seeking the medium through which the research will be conducted, for example, if the approach is qualitative, the strategies involved would be interviews, experiment and grounded theory and if it's a quantitative approach, the strategies involved would be surveys and action research. The time horizon for the research needs to be understood, it can either be cross sectional or longitudinal, depending on the research question.

One of the main aspects of the research design is collecting and analysing the secondary data or analysis of the data collected and also reaching a valid conclusion.

In as much as the research onion has been widely accepted and globally applied, it is still being criticized. It has been argued by Guba and Lincoln (1994) that the question of research method are of secondary importance to those questions which paradigm is applicable to the research. Taylor et al (2004) defined paradigms to mean “patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished”.

3.3 RESEARCH PHILOSOPHY

Research philosophy generally refers to the development of knowledge and the nature of that knowledge in relation to research. (Saunders and Lewis (2012). It is the philosophical position that influences the way a research is being conducted. Positivistic and phenomenological are two main research philosophies, even though the two can sometimes overlap and their positions may be identifiable in any research project. (See fig. below)



Types of research philosophy Neville (2007)

3.3.1 POSITIVISTIC APPROACH

These are meant to identify, measure and evaluate any phenomena and also to provide a rational explanation for it. This explanation attempts to come up with causal links and relationships between the various variables of the subject and then link them to a particular theory Neville (2007). The primary purpose of a positivist approach is to study observable and measurable variables in a particular controllable situations and to describe the reactions of these variables to treatment applied by the researcher Saunders and Lewis (2012).

3.3.2 PHENOMENOLOGICAL APPROACH

On the other hand, the phenomenological presumes that people will always influence events and act in ways that won't be predicted and will upset any constructed rules. This perspective is particularly concerned with understanding behaviour from the participants' own subjective frames of reference Neville (2007).

The research philosophy for this project can be framed within the positivism philosophy. This research investigates the recent technological changes in HRM practice focusing on HR technologies and the technological tools used to achieve HR duties in Headhunt Int. This study gathered numeric data of employees and managers who were involved in HR duties and their perception towards it were gotten from measurable variables. Therefore, taking into consideration that positivism is based on the gathering of numerical data, focus on facts and relies on measurable variables Saunders and Lewis (2012), this philosophy therefore was chosen due to its' fitness with the objectives and the quantitative method used in this research.

3.4 RESEARCH APPROACH

Research approach can be said to be the extent to which a researcher is clear about the theory at the initial stage of the research as it brings about a relevant question regarding the research design, which is; the kind of approach that should be selected and used for the research, should it be deduction or induction. (Saunders et al (2007).

3.4.1 DEDUCTION

Can be defined as a research approach which has to do with the testing of a theoretical proposition by making use of a research strategy mainly designed for the purpose of its testing. Deduction is also directly linked with scientific research Saunders (2009).

3.4.2 INDUCTION

Can be defined as a research approach that has to do with the development of theories, as a result of analysing already collected data Saunders and Lewis (2012). A researcher who will be using an inductive approach is likely to be primarily concerned with the context in which events are taking place, as a result, the study of a small samples of subjects might be more appropriate Saunders (2009). Below are differences between deduction and induction.

DEDUCTION	INDUCTION
<ul style="list-style-type: none"> - Scientific principles. - Moving from theory to data. - The need to explain causal relationships between variables. - The collection of quantitative data. - The application of controls to ensure validity of data. - The operationalisation of concepts to ensure clarity of definition. - A highly structured approach. - Researcher independence of what is being researched. - The necessity to select samples of sufficient size in order to generate conclusions. 	<ul style="list-style-type: none"> - Gaining an understanding of the meanings human attach to events. - A close understanding of the research context. - The collection of qualitative data. - A more flexible structure to permit changes of research emphasis as the research progresses. - A realisation that the researcher is part of the research process. - Less concern with the need to generalise.

Major differences between deductive and inductive approaches to research Saunders (2009)

The approach selected and used for this research is the deductive approach. The reason why this approach was selected is due to the initial selection of the quantitative method for this research, which is aligned with the characteristics of deductive approach. According to Saunders et al (2009), quantitative studies make use of theories inferentially. Normally at the initial stage of the study as the literature review, it is followed by testing this theory with the findings from the data which will either confirm or reject it. The same can be said for

this study, as the cumulative findings of the literature review was presented in the early section of the study, the research objectives and questions were being drawn from these findings. As a result of the numerous work being done in the literature on HR technologies and also as a result of time constraint for the completion of this research, the inductive approach was not employed.

3.5 TIME HORIZON

A research frame can either be a snapshot or a diary perspective. The snapshot version is known as cross sectional while the one akin to a dairy format is called a longitudinal. It's been a practice that most research projects which have been undertaken academically are time constrained. Therefore the time horizon selected here is cross sectional. Cross sectional method is normally carried out once and it essentially represents a snapshot of a peculiar event at a particular period in time Sanders et al (2009). Cross sectional study usually employ the survey strategy, even though it may also use qualitative methods depending on the research question Robson (2008). It will not be possible to employ the longitudinal study in this research because, its strength lies in its capability to study change and development over a period. The longitudinal time horizon is not adopted in this research due to time constraint and the data collected is only in a particular time frame.

3.6 QUESTIONNAIRE DESIGN

After carefully considering various methods of collecting data, the researcher adopted the questionnaire method which was considered to be the most appropriate for the research questions and objectives. The questions from the questionnaire are standardised questions, which can be interpreted by the respondents as the same Robson (2011).

It is worth noting that closed questions are sometimes referred to close ended questions Fink (2009). They are the kind of questions that will be asked in the questionnaire, as they provide a number of options which a respondent is instructed to choose from. The researcher employed this means of asking questions because, it is a faster and easier way of answering questions as the writing required from respondents is minimal and the responses are usually easy to compare, because they have been predetermined DeVaus (2002).

The questionnaire is divided into five sections. The first section which is section A, focus on the demographics of the respondents. Generally, the idea behind considering demographics is to be able to understand the population's characteristics, which is their attributes Ghauri and Gronhaug (2010). On the other hand, attributes are known as those things which a respondent possess Dillman (2009). They are used to ascertain how the behavioural pattern differ among respondents. Example of attributes are, gender, age, position, job level etc.

The questions asked by the Researcher in section A, offers the Respondents a list of responses which they are to choose from, by ticking in the appropriate box. This type or forms of questions were asked because the researcher need to be sure that the respondents have considered the whole possible responses Saunders et al (2012).

Demographics were used in the questionnaire to be able to see how closely the sample replicates the known population and also because the more closely the demographic distribution of survey respondents matches the population, the more confidence one can have in the data Jankowics (2005). They were also used so as to be able to analyse the sub-groups of those responding to the survey Michael et al (2000).

According to Dillman (2009), there are three types of data variables that can be collected via questionnaire, and they are opinion, behaviour and attribute. The variable collected or employed in the questionnaire for this study is behaviour, because it is intended to record what the respondents do. When a researcher is recording what respondents do, he is invariably recording their behaviour which is more of experience.

The questions asked in section B to E are investigative questions. They are generated with regard to the research questions. Responses to these questions is therefore important because the answers to these questions is predicated on the ability of the researcher to analyse the research data and be able to meet the objectives of the research Bloomberg et al (2008).

Category questions are meant to fit into just one category. This explains why the researcher employed the category questions in section B to E, so that the respondent's answers can fit only into one category. Fink (2009) is of the view that this kind of questions are most useful if the data to be collected are about behaviour of the respondents. He also stated that self-

completed questionnaires should not have more than five response categories, which is why the questionnaire has five response categories.

Section B to E used a Likert style rating technique to measure the variables therein Dillman (2009).

Finally, the reason why demographics were included in the questionnaire is to be able to differentiate between the different job levels, so as to know the major subgroup which partake more in HR activities, their age was also asked, and as age might be a sensitive topic for some people, it was categorised into various categories of 20 – 35, 36 – 44, and 46 – 50. This was asked so as to be able to find out which of the age categories are more in the HR technology area.

3.7 SOURCES OF DATA

There are two types of data that shall be used in this study, and they are: Primary and Secondary data.

3.7.1 PRIMARY DATA

In order to carry out this study, data was collected using quantitative methods, by making use of survey questionnaires. This data was produced from sample population by the use of questionnaires, which was distributed to the organisation.

3.7.2 SECONDARY DATA

For the purpose of this study, relevant textbooks, journals, papers and articles were collected and reviewed. This source of data regarding the diverse HR and technologies is known as secondary data.

3.8 INSTRUMENT FOR DATA COLLECTION METHODS

Considering the need to obtain accurate response on the subject matter, data was collected through a structured questionnaire. This questionnaires where personally handed to the employees and managers of Headhunt Int. The questionnaires were administered to various departments of the organisation.

For the purpose of this research, the questionnaires are divided into five sections. Section A, deals with basic demographic information regarding the respondents such as gender and age. Section B, seeks to determine the various technological tools used by employees at Headhunt Int. While section C, captures information on the HR technological practices in Headhunt Int., section D, deals with the extent to which HR technology ease administrative duties, Finally, section E, is structured to expose the challenges encountered as a result of using HR technology.

To facilitate wider information gathering, the questionnaires were designed in such a way that section A consisted of closed-ended questions. From section B to E a structured 5 points modified Likert scale battery format of strongly agree (5) Agree (4) Undecided (3) Disagree (2) and strongly Disagree (1) was employed. The questionnaire provided avenue for respondents to indicate the extent to which they agree/disagree with various statements. The rationale behind using this method is that it minimises bias.

Similarly, the respondents that were administered questionnaires were asked to indicate with a tick the extent to which they agree or disagree with a particular statement or question.

The variables therein were measured using the Likert battery scaling technique. The meaning of each score level is interpreted below:

Very often/strongly agree/very large extent/almost always true = 5

Often/agree/large extent/mostly true/ = 4

Sometimes/neither agree nor disagree/moderate extent/sometimes true/ = 3

Very little/disagree/small extent/rarely true/ = 2

Not at all/strongly disagree/very small extent/not at all true/ = 1

The questionnaire was made based on the past questionnaires idea and concept.

3.9 A SIMPLE FORMAT OF THE QUESTIONNAIRE ANALYSIS

1. Demographic characteristics of the respondents

- Age
- Position
- Years of service

In the demographic information, the age of the respondents needs to be ascertain, so as to know the particular age group and percentage of the persons involved in the use of HR technology. Similarly, the position they occupy will also inform this study on the duties they perform. Finally, their years of service in the organisation will indicate the extent and duration of their employment with the organisation to have been conversant with HR practices.

2 .The various technological tools used

- Microsoft applications
- Email
- Websites
- Google applications
- PDF application
- Extranet
- Adobe
- Tele-conferencing
- Zoho presentation
- Spreadsheets
- Wikis
- Survey monkey
- Video text
- Cloud
- Internet

3. The HR technological practices.
4. The extent to which HR technology ease administrative duties.
5. The challenges encountered as a result of using hr technology.

The reason why the use of questionnaire was employed in this study, is because the research is a descriptive research, such that it seeks to understand the organisational practices of the organisation (Headhunt Int.) which will enable it to identify and describe the variability in different phenomena Gill and Johnson (2002).

The questions in the survey were set after a careful review of the study so as to ensure that all issues that form the crux of the research are included. In this regard, only data essential to the subject matter was included. Consequently, each of the question asked is determined by the data needed to be collected, as it help to answer the research question and meet the objectives of this study. The questions were therefore, formed from the research question and objectives of this study Mark et al (2007).

Questionnaires could be administered electronically, using internet (internet mediated questionnaires or intranet (intranet mediated questionnaires), posted to respondents, who in turn return them by post after completion (post or mail questionnaires) or delivered by hand to each respondent and collected later (delivery and collection questionnaires) Mark et al (2007).

The questionnaires in this work are self-administered. The idea is to allow respondents answer the questions themselves, so as to have reliable responses. It should be noted that sending the questionnaires by post or mail to the organisation may take more time. This would deny the author the opportunity of determining whether it was the respondents that actually answered the questions. By personally delivering the questionnaires, this Researcher had the opportunity of checking to see the questions answered at collection point.

In order to ensure that the data collected will enable the research questions to be answered and the objectives of the study to be achieved, the questions asked were

investigative in nature. They will need to be answered so as to satisfactorily address the research questions in order to meet the objectives Blumberg et al (2005).

3.10 SAMPLING METHODS AND SELECTING RESPONDENTS

The sampling techniques are important in a research, where it's difficult to survey the entire population as a result of limited time or limited resources, researchers are usually able to draw conclusions on only selected samples. However, for findings from samples to be generalised, those samples will have to be represented Bryman and Bell (2007).

In determining which company to be used for this research, the author randomly did a sample of companies, and randomly selected one from the companies, which is Headhunt International. This company was used because it provide mainly recruitment and selection services, which was an added advantage, since one of the research question was to examine the technological changes in HR practice.

For the purpose of this study, the sample procedures was administered to 40 employees and managers of Headhunt Int. out of which a total number of 30 Employees responded. The number of respondents was determined bearing in mind the population or size of the staff of the organisation.

Prior to inviting the respondents to participate in this research, permission was first sought and obtained from the management of Headhunt Int. This was followed by an invitation letter to the various departments seeking their consent and explaining the reason for the study. The departments were then invited to willingly and voluntarily participate. For those who were comfortable in participating, the questionnaires were administered personally. The employees who were willing to fill the questionnaires took approximately 5 – 10 minutes, while those that were unable to do so agreed on a specified time. For the fear of the respondents misinterpreting the questions, more attention was given to those who were a little confused as to what was required of them, so as to get the same interpretation for the whole survey. Attached to the questionnaire was a covering letter explaining the main objectives of the study being conducted.

3.11 DATA ANALYSIS – STATISTICS USED TO ANALYZE THE DATA

The statistical methods for quantitative analysis methods was employed for the data analysis. The statistics used in this study was descriptive statistics, which went to describe the results in the form of frequencies, mean, percentage, and standard deviation. SPSS was used to analyse the primary data. The comparative analysis was conducted to assess the attitude and extent according to the variables.

3.12 ETHICAL ISSUES

It very necessary in every research not to cause harm to respondents or use the findings from the research in anyway against them Fisher (2004). Research ethics has to make sure that the design of the research methodology is sound and morally defensible to all the parties involved. Ethics is something that should be taken into consideration in a research process, this is why the data collected in this research is confidential and anonymous so as to ensure that the data is kept private. The nature of this research does not need or require in depth information on the respondents, as such their names or any other form of identification was not required for the compilation of this questionnaire. The age and gender of the respondents was only included in other to be able to build a quick profile for the participant and the ages were limited to age brackets.

While focusing on the data collection element, it states that the respondents have willingly provided the information used by the researcher, if this information is being changed or manipulated in anyway, it will be considered as convert and unethical behaviour. The respondents were given the option of withdrawing at any time they feel uncomfortable, which was respected by the researcher Saunders et al (2003).

The identity of the research population cannot be disclosed without their consent. The information collected from the respondents was not reproduced and the responses received from them shall be documented and shown to the management as a sign of the author's appreciation for approving the survey on their organisation.

It is important to note that the respondents were provided with sufficient information regarding the research and its purpose. The questions contained in the questionnaire was kept simple and not sensitive, in other to eliminate any form of physical or emotional harm

like, humiliation, embarrassment or physical discomfort. All the matter gathered was used purely for the purpose of the research and constructive conclusion. Suffice it state that the information gathered was from individuals and not organizations hence, making it reliable.

Upon completion of the survey and compilation of results, the questionnaires were destroyed, so as to protect the respondents and prevent data from being used by other persons or falling into the wrong hands.

3.13 LIMITATIONS OF USING THE QUANTITATIVE APPROACH FOR THIS RESEARCH

Research limitation was said to be any characteristic of a research design that has an effect on the use of the results in a study USC Libraries (2014). It's useful to acknowledge that the researcher is aware of the things which are unreliable in the research, which have had an impact on the results USC Libraries (2014).

The findings of this research, which was gotten from a selected population can be generalized strictly to the population from which that sample was taken, therefore, this is an inherent limitation to any research of this kind. A large scale research, covering a larger population sample across several organisations would be more representative and will increase the quality of this research Bryman and Bell (2007)

The use of quantitative method to access HR technology in Headhunt Int. is not sufficient enough. A combined approach would have been able to provide an in depth understanding of the HR technologies employed in organisations. Similarly, a semi structured interview would have gone a long way to contribute to this study. With enough time this research would have adopted more than a case study approach instead of concentrating on just one company.

3.14 RELIABILITY AND PILOT STUDY

Three employees of Headhunt Int. were initially tested. This was done to ascertain the level of understanding and interpretation of the questions by the respondents. The feedback from this pilot study was used to improve the reliability of the measuring instrument. It was important to pay attention to the reliability of the instrument so as to enhance the reliability in terms of making sure that the questions were appropriate to the issues under investigation. When the results from the pilot study was received, some adjustments were

effected based on the comments from the three participants. For example, instead of the long list of technological tools like google search, Gmail, Google drive etc., the phrase google applications was adopted. Some questions were also simplified based on the feedback obtained. The questionnaires were filed based on the time availability of the participant's. This pilot study was undertaken to strengthen the reliability and validity of the research instrument.

3.15 SUMMARY

From the discussion in this chapter, it is obvious that the chapter has presented, analysed and justified the key methods used for the main parts of this study. It highlighted the research design and discussed the methods around the research. It portrayed an overview of the methodological framework used to identify those technologies that enhance employee duties. Apparently, the research involves the use of quantitative methods that is based on statistical analysis of collected survey data from Headhunt Int. The procedures stated in the methodology helped this process by which the study was able to identify the technological tools employed in Headhunt Int.

CHAPTER 4

RESULTS AND FINDINGS OF DATA ANALYSIS

4.1 INTRODUCTION

Suanders et al (2012), opined that data collected through quantitative methods, gathered and analysed in its raw form is of little or no use to anyone. The data will have to go through a set of rules or graphs and charts to show patterns or statistics so as to be able to properly analyse the results of this type of research.

At this point, it is worth emphasising that the survey in this research was self-administered. Upon receiving the questionnaire from the respondents, the researcher used the SPSS software in analysing the data received. Further, the researcher explained the findings from the questionnaires in an attempt to answer the research questions and some of the objectives as regards to HR technology.

The questionnaire addressed one of the objectives and the two research questions from this study. The objective addressed here, was the HR practices in the organisation and the technological tools they use. This is because it entails more, on what the respondents practice at work and so they will be in the best position to provide answers for the questions asked. The same goes for the research questions, as only the respondents are aware of the challenges they face as a result of using HR technology and so only them, will be able to say whether or not it has been able to reduce administrative burden.

4.2 DEMOGRAPHIC INFORMATION

Section A of the questionnaire (refer to appendix) contains the primary demographic questions, which were used to gain insight into the nature of the population in terms of their ages, gender, job level and the years of experience.

4.2.1 RESPONSE RATE

The questionnaires distributed were 40 in number but only 36 responses were received. Thirty six questionnaires were completed sufficiently for the analysis. Four of the questionnaires were not properly answered as there were omissions in some of the

questions and as such discarded. The remaining two were abandoned as efforts to retrieve them from the two respondents proved abortive.

TABLE 1: EMPLOYEE RESPONSE

	Planned response	Actual response
Total sample size	40	30

DESCRIPTIVE STATISTICS FOR DEMOGRAPHIC PROFILES

The following are the frequency tables and bar charts of the demographic information (ages, gender, job level and the years of experience) of the employees at Headhunt int.

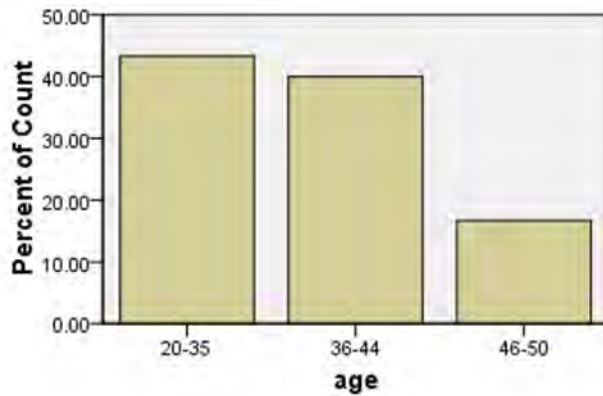
4.2.2 AGE OF RESPONDENTS

The age profile of the data analysis shows that 43.3% of the employees fall into the ages of 20-35 years of age, while 40.0% of the employees were between the age of 36-44 years old, and lastly, the final age profile was 16.7% falling within the 46-50 range. It can be observed from the analysis that the respondents with ages between 20 – 35 years of age are more in the organisation, as such they happen to be the of persons who use HR technology more in the organisation See table 2 and figure 1 below.

TABLE 2: AGE CATEGORY

AGE GROUP

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20-35	13	43.3	43.3	43.3
36-44	12	40.0	40.0	83.3
46-50	5	16.7	16.7	100.0
Total	30	100.0	100.0	

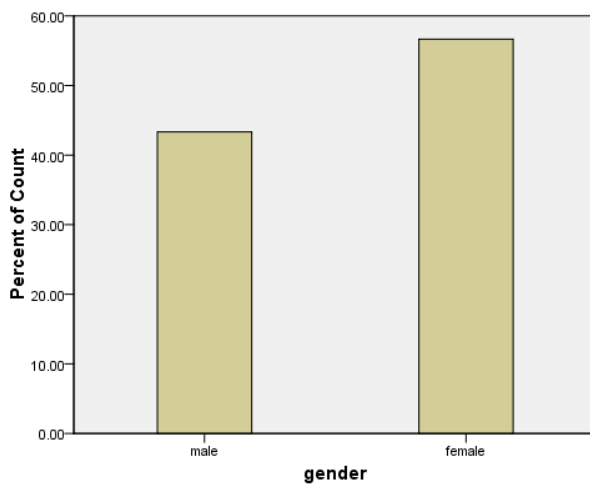


4.2.3 GENDER OF RESPONDENTS

The analysis of findings from the data portrays the male comprising of 43.3%, while the female was made up of 56.7%. It can be seen that the females are the majority having a total number of 17 as presented in the table below.

TABLE 3: GENDER GROUP

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	13	43.3	43.3	43.3
	female	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

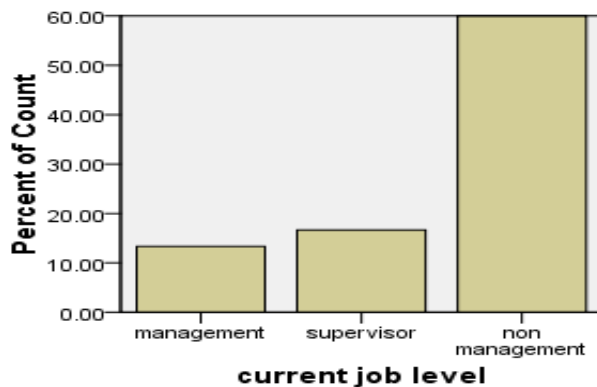


4.2.4 CURRENT JOB LEVEL OF THE RESPONDENT

The results of the analysis depicts the current job level of the employees in Headhunt int. as follows: the management is made up of 13.3%, the supervisors are made up of 16.7% while the non-management staff are made up of 70.0%. From the analysis, the non-management staff are more in the organisation as such, they will be in a position to better understand the use and challenges of HR technology.

TABLE 4: JOB LEVEL GROUP

		current job level			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	management	4	13.3	13.3	13.3
	supervisor	5	16.7	16.7	30.0
	non-management	21	70.0	70.0	100.0
Total		30	100.0	100.0	



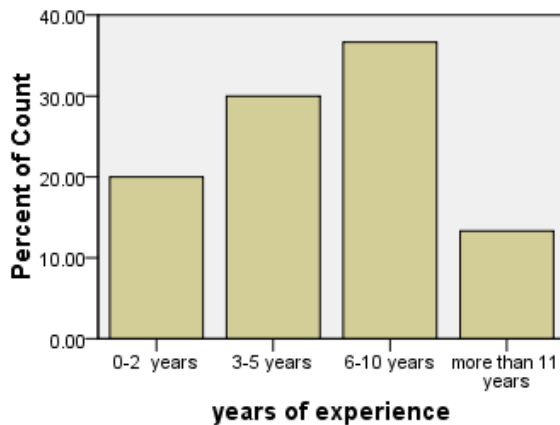
4.2.5 YEARS OF EXPERIENCE OF THE RESPONDENT

The analysis shown revealed that 20.0% have 0-2 years of work experience in Headhunt int. with 30.0% which falls within the bracket of 3-5 years, 36.7% which is the highest, have 6-10 years' experience and 13.3% have more than

11 years' experience in the organisation as presented in the table below.

TABLE 5: EXPERIENCE GROUP

		Years of experience			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-2 years	6	20.0	20.0	20.0
	3-5 years	9	30.0	30.0	50.0
	6-10 years	11	36.7	36.7	86.7
	more than 11 years	4	13.3	13.3	100.0
	Total	30	100.0	100.0	



4.2.6 RELATIONSHIP BETWEEN AGE AND YEARS OF EXPERIENCE AT HEADHUNT INTERNATIONAL

Results shown on table 6, shows that 27.2% of the young employees in the age bracket of 20-35, had worked for 0 to 2 years at Headhunt int. Only 18.1% of employees aged between 21-30, had worked for 3-5 years at Headhunt int. 45.5% of employees aged between 21-35, had worked for 6 to 10 years at Headhunt int. While only 9% of employees aged between 20-35years had worked for more than 11 years at Headhunt int. On the contrary 15.3% of the employees under the age group 36-44 years have worked for 0-2 years, 46.1% of employees under 36-44 have worked for 3-5 years, 30.7% of employees under the same age group have worked for 6-10 years and 7.6% fall under more than 11 years. For the age group 46-50, 20% have worked for 0-2 years, 40.6% have worked for 6-10 years, and while 20% have worked longer than 11 years at Headhunt int.

TABLE 6

age * years of experience Cross tabulation

Count

		years of experience				Total
		0-2 years	3-5 years	6-10 years	more than 11 years	
Age	20-35	3	2	5	1	11
	36-44	2	6	4	1	13
	46-50	1	1	2	1	6
Total		6	9	11	3	30

4.3 SECTION B

The assessment of the technological tools being used at Headhunt Int. by the employees, was done using a five-point Likert scale. This section goes to show the uses of the various technological tools. The most frequently used tool would be determined from the analysis. The mean scores obtained from the analysis of data were rated in the following manner: 1-1.4 = not at all; 1.5 - 2.4 = very little; 2.5 - 3.4 = sometimes; 3.5 – 4.4 = often; 4.5 – 5.0 = very often. Results shown on table 6 below indicates that Microsoft applications, email, google applications, teleconferencing and the internet has the mean scores ranging from 4.5 to 5.0. This shows how often these tools are being used at work which is a high level.

Looking back at the literature review, Gardner et al (2003) stated that HR technology is known to use both intranet and internet which tend to lessen the quantity of work done, which would have been done manually without the internet, this is why the internet is being used in organisations and from the analysis, the internet has a high mean score. Tele – conferencing according Mike (2014), could be used to interact with job applicants and employee prospects around the world without having to be physically present.

Websites, pdf applications, adobe, spreadsheets, survey monkey and cloud are also being employed in the organisation to a large extent with their mean scores ranging from 3.5 to 4.4.

The extranet, zoho presentation, wikis and video text all fell under sometimes, very little and not at all range, which goes to show that they are less employed at work.

Employees can use HR tools to upgrade their information in an organisation themselves, allowing HR professionals to be free from such duty which could be time consuming, and perform other functions such as interpreting information Gardner et al (2003).

TABLE 7

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Microsoft applications	30	2.00	5.00	4.5667	.85836
Email	30	2.00	5.00	4.4000	.85501
Websites	30	1.00	5.00	3.9000	1.29588
google applications	30	2.00	5.00	4.1000	1.15520
Extranet	30	1.00	5.00	2.9000	1.42272
pdf applications	30	1.00	5.00	3.9667	1.42595
Adobe	30	1.00	5.00	3.5333	1.50249
zoho presentation	30	1.00	5.00	2.4333	1.65432
tele conferencing	30	1.00	5.00	4.1333	1.13664
spread sheets	30	1.00	5.00	3.6000	1.42877
Wikis	30	1.00	5.00	2.8000	1.42393
survey monkey	30	1.00	5.00	3.8667	1.22428
video text	30	1.00	5.00	2.7333	1.55216
Cloud	30	1.00	5.00	3.9667	1.37674
Internet	30	1.00	5.00	4.2667	1.17248
Valid N (list wise)	30				

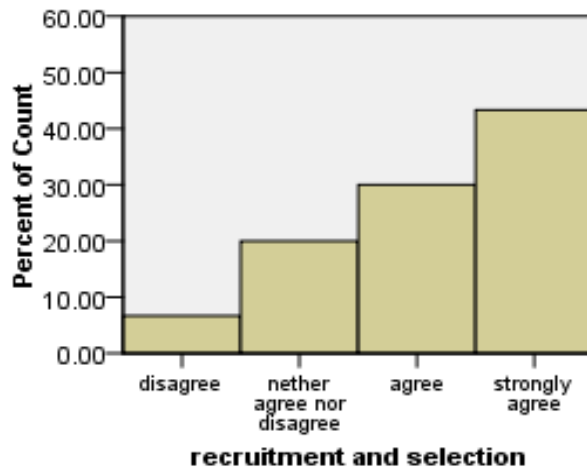
4.4 SECTION C

This section shows the HR technological practices in the organisation. The histogram for each question is shown below, showing the % of each answer by the various respondents.

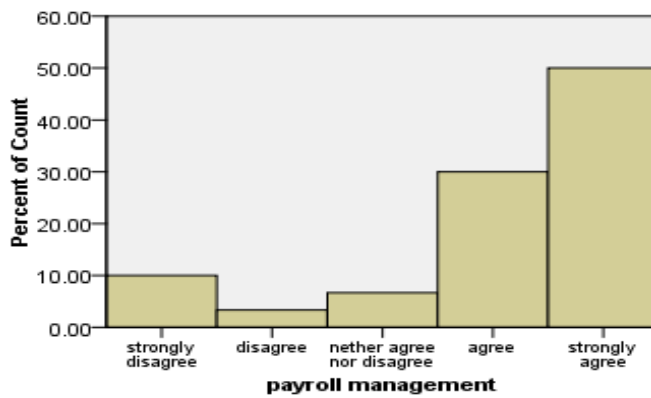
The findings and results illustrated in the histograms below provides the following relevant information. All the questions, from 1 to 15 in this section requested the respondents to indicate the extent to which they agree with the statements made, which goes to show the HR technology practices in their organisation and will indicate which HR function employs the use of technology and which does not.

Question 1: Recruitment and selection, 44% of the respondents strongly agree, while 30% agree, that is to say that nearly half of the sample size agree that technology is being used in

recruitment and selection process. A few of the employees neither agree nor disagree. None of the respondents strongly disagree.

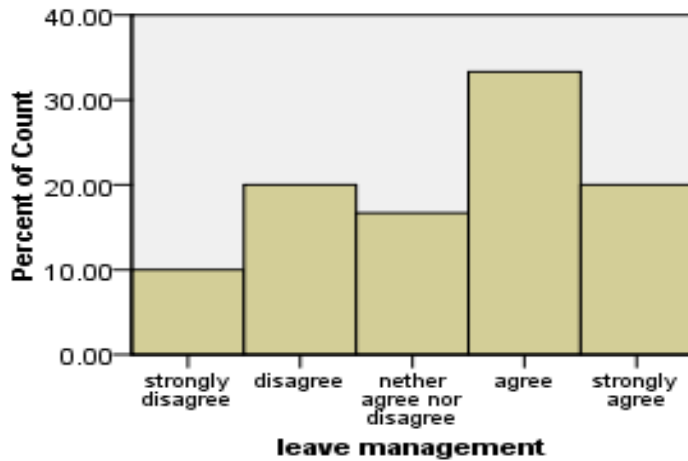


Question 2: Payroll management, 50% of the sample strongly agree while 30% agree that technology is used for this function.

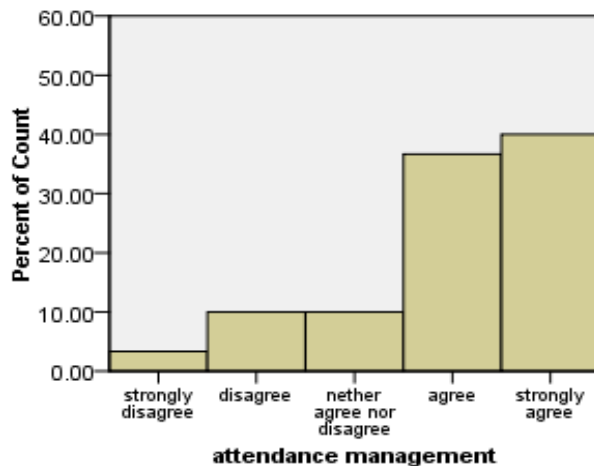


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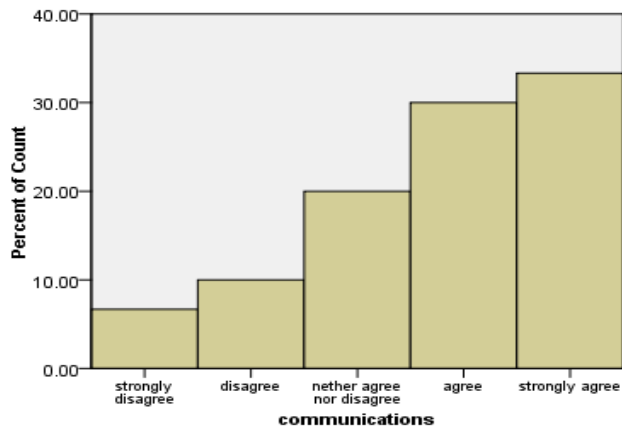
Question 3: Leave management - 35% agree while 20% strongly agree and 20% also disagree with using technology in this HR function. We can see that technology is not always used for this function.



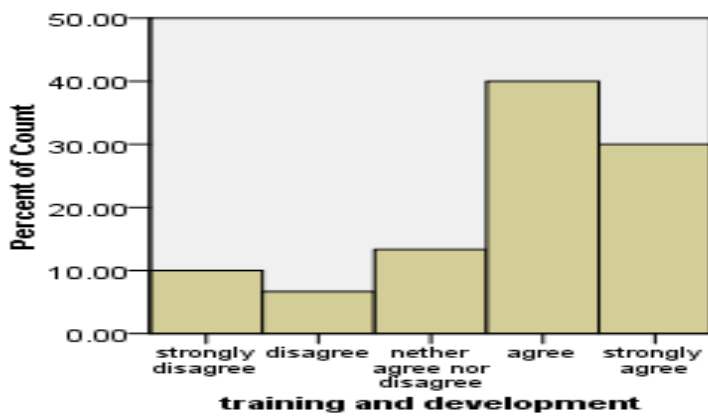
Question 4: Attendance management - there's a huge gap between the strongly agree and agree which is 40% and 38% respectively. The respondents that disagree are 10% only.



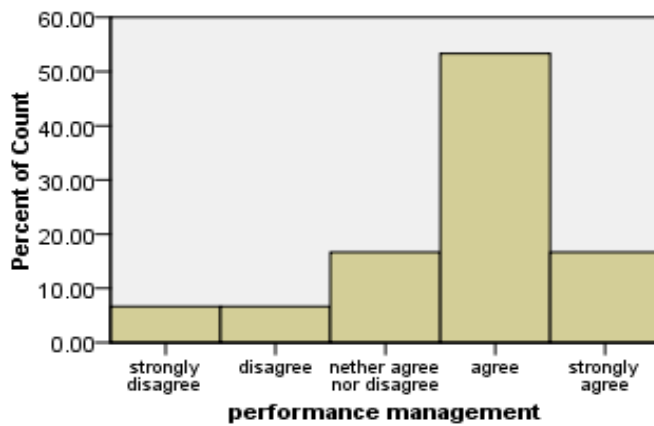
Question 5: Communications - 34% of the total sample strongly agrees while 30% agree and 20% neither agree nor disagree.



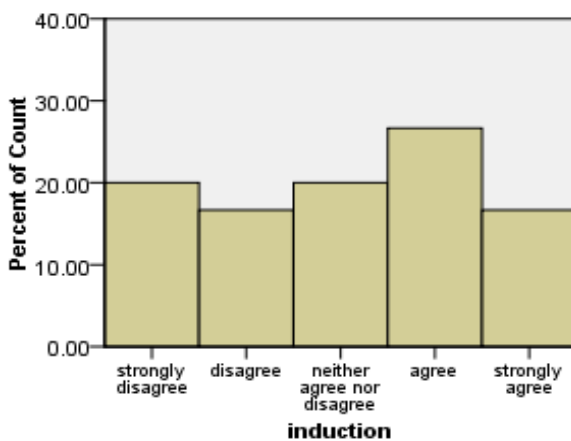
Question 6: Training and development - 40% agree while 9% of the respondent disagree. It can be said here that technology is being used for this function.



Question 7: Performance management - it can be seen here that technology is highly used for this function as 52% of the sample size agree while only 9% disagree.

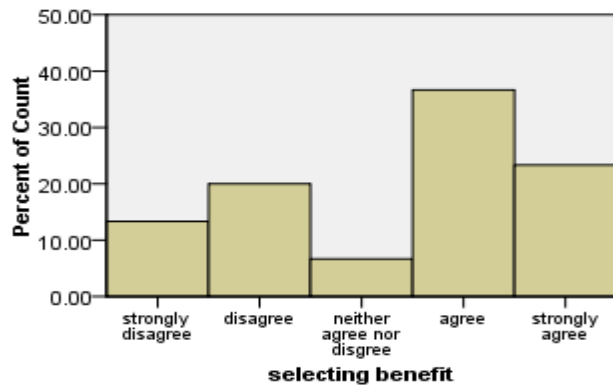


Question 8: Induction - the use of technology for this function is low as 25% of the respondents agree, while 20% disagree, and neither agree nor disagree.

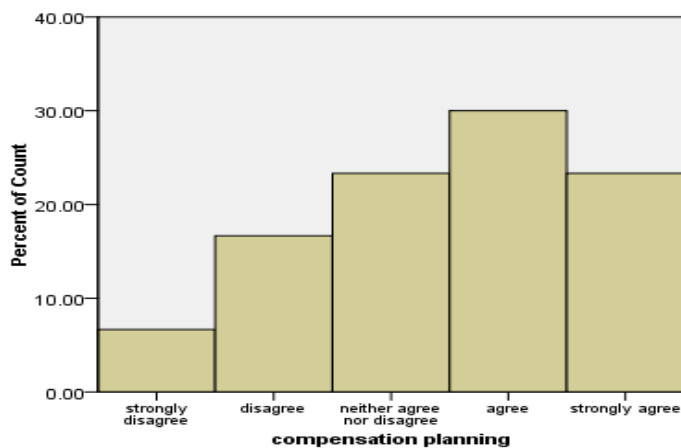


Question 9: Selecting benefits - 38% of the sample size agree to use technology in this function and only 19% disagree.

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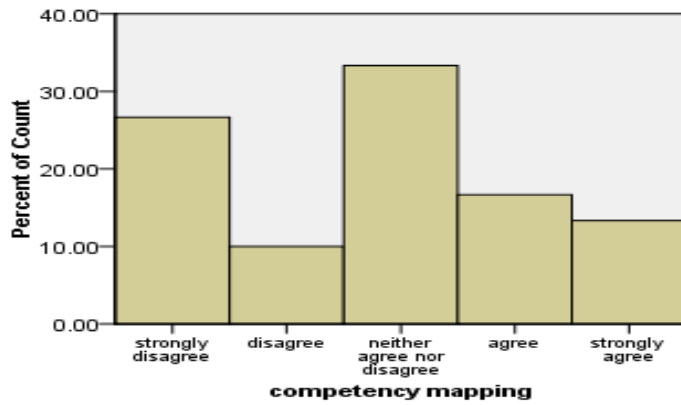


Question 10: Compensation planning - 30% agree while 8% strongly disagree, while the respondents who strongly disagree to using HR technology in compensation planning is 8%

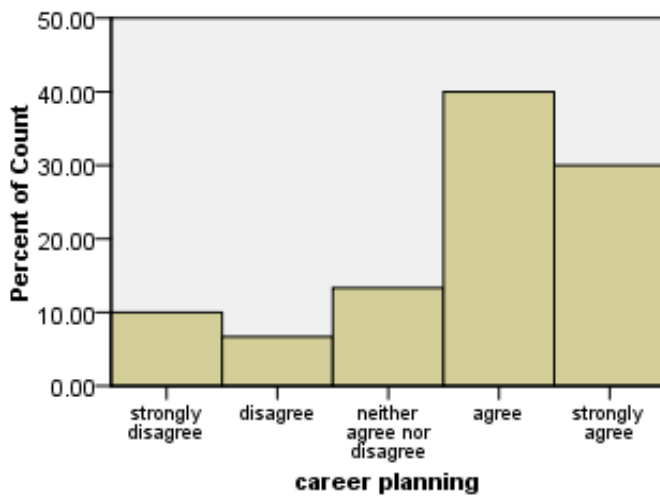


Question 11: Competency mapping- we see here that 28% of respondents strongly disagree, while 32 neither agree nor disagree and only 14% strongly agree to use technology in this function.

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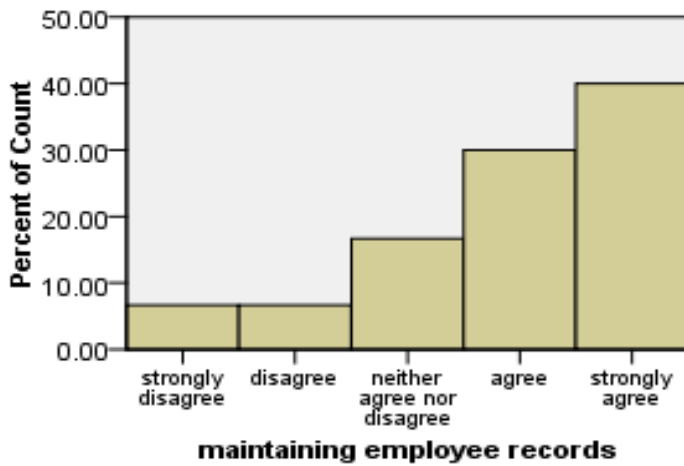


Question 12: Career planning, technology is being use for this function, as we see 40% agree and only 9% disagree.

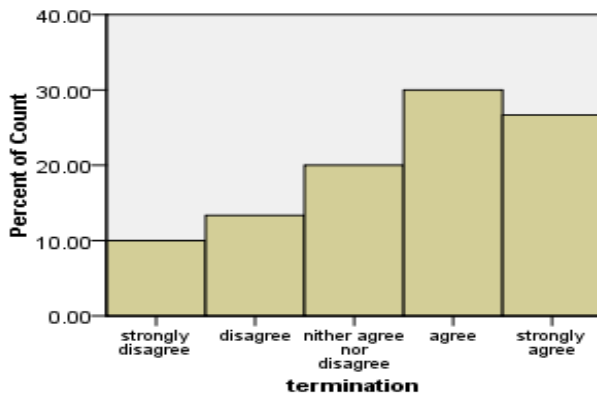


Question 13: Maintaining employee records - 40% strongly agree, while 8% disagree and 12% neither agree nor disagree.

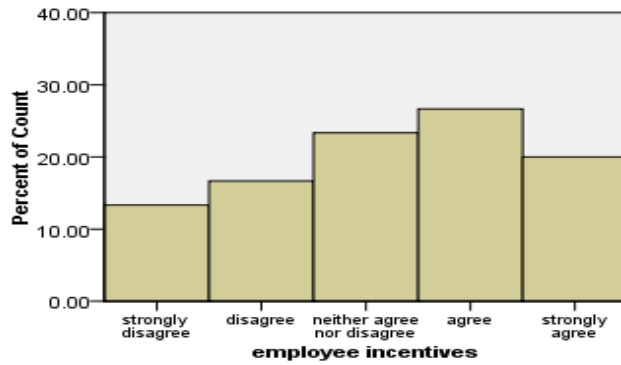
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Question 14: Termination - 30% agree and 10% disagree to use technology for this function.



Question 15: Employment incentive - only 28% agree and 26% neither agree nor disagree while 15% of the sample size disagree to use technology for this function.



Thus, the findings for this objective confirms that technology is largely employed in HR practice when using the various HR functions listed above, in each of the question.

4.5 SECTION D

Fifteen questions were asked in the questionnaire, in this section to indicate the extent to which HR technologies ease administrative duties.

The effort to reduce administrative duties in HR, has been right from the evolution of HR technology, where HR users were being introduced to a desktop system in carrying out there administrative duties Ralston et al (1998) which could not be done using mainframe system. In the comparison between traditional HR and E-HR, we see that resumes were written down on paper, and then posted out, which can take days to arrive. But with E-HR, Electronic resumes and posting via the internet will take only minutes Lengnick et al (2003).

To be able to achieve this, a multi attribute approach was employed, which adopted a six – point Likert scale. The scale ranges from 1 – 6, where 1 represented very small extent and a scale of 6 represented not applicable. The mean scores obtained from the analysis of data were rated in the following manner: 1 – 1.4 = very small extent, 1.5 – 2.4 = small extent, 2.5 – 3.4 = moderate extent, 3.5 – 4.4 = large extent, 4.5 – 5.0 = very large extent, 5.4 – 6.0 = not applicable.

The table 8 below, shows that technology has to a large extent, been able to reduce administrative duties. This is evident in the analysis which depicts a moderate mean score of 3.5 and the reduction of paper work in the work place had a mean score of 4.1. Most of the results were in the large extent range (please refer to the table below)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation

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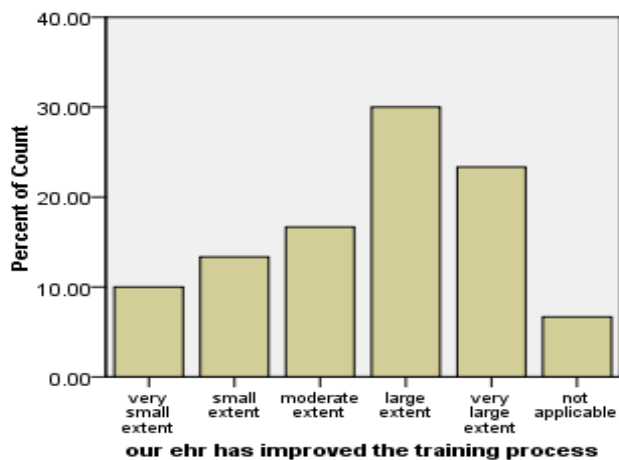
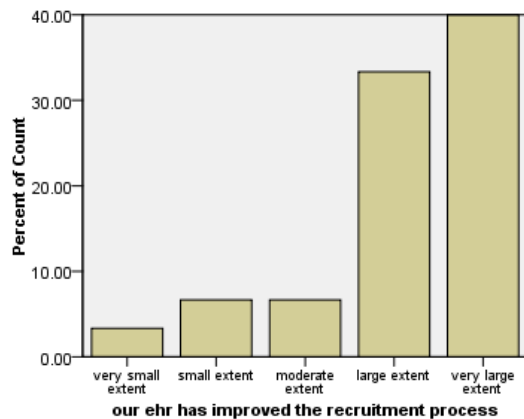
our ehr has improved the recruitment process	30	1.00	5.00	4.2000	1.06350
our ehr has improved the training process	30	1.00	6.00	3.6333	1.42595
our ehr has improved the data input process	30	1.00	6.00	3.8667	1.16658
our ehr has improved the data maintenance process	30	1.00	6.00	3.8000	1.42393
our ehr has helped with forecasting staffing needs	30	1.00	6.00	3.5333	1.83328
our ehr has decreased paper work	30	1.00	6.00	4.1000	1.24152
our ehr has improved our ability to disseminate information	30	1.00	5.00	3.5333	1.50249
the information generated from our hris has added value to our organisation	30	1.00	6.00	3.5333	1.30604
our hris has made our hr decision making more effective	30	1.00	6.00	3.5667	1.67504
the information generated from our hris helps our organisation to make more effective promotion decisions	30	1.00	6.00	3.5333	1.47936
the information generated from our hris helps our organisation decide on employee raises	30	1.00	6.00	3.5333	1.47936
the information generated from our hris helps our organisation decide when to hire	30	1.00	6.00	3.3000	1.51202
the information generated from our hris helps our organisation make better decisions in choosing better people	30	1.00	6.00	3.7333	1.85571

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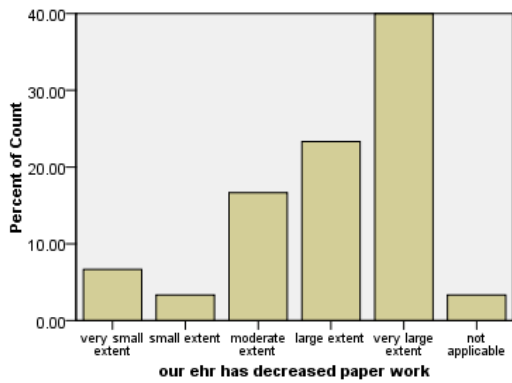
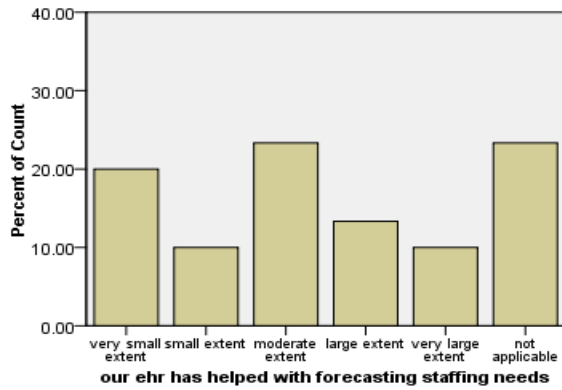
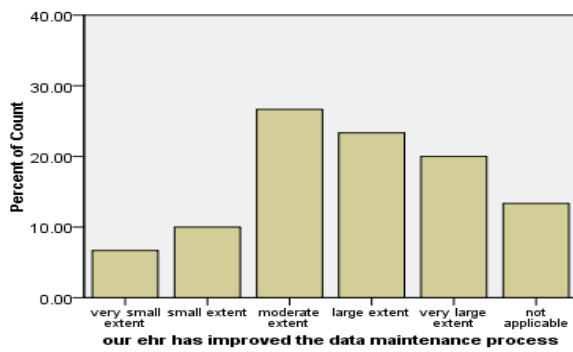
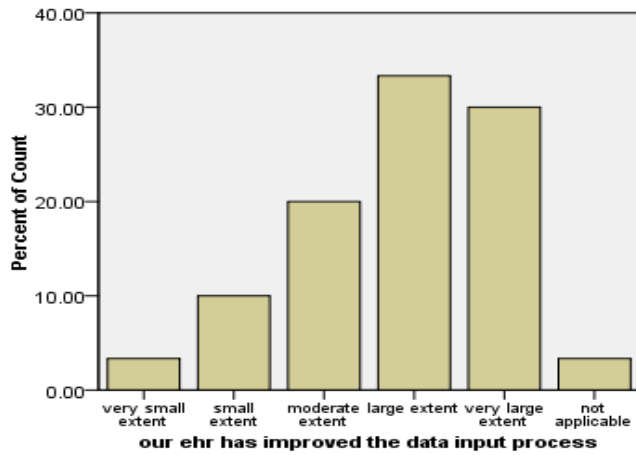
the information generated from our hr system helps our organisation decide when training and skill development are necessary	30	1.00	6.00	3.6000	1.73404
system upgrade has improved the hr system	30	1.00	6.00	3.7333	1.31131
Valid N (list wise)	30				

4.5.1 A GRAPHICAL BAR CHART REPRESENTATION FOR SECTION D

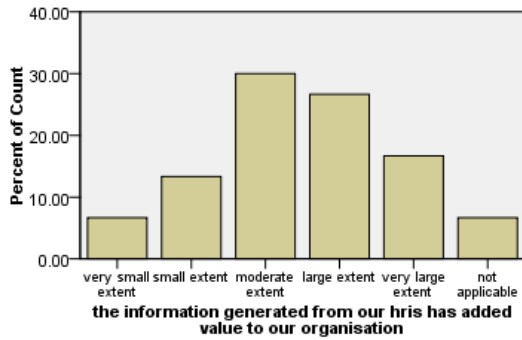
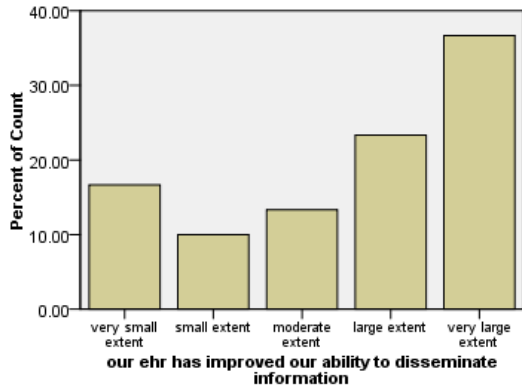
The bar chart for each question is presented below, showing the % of each answer by the various respondents.



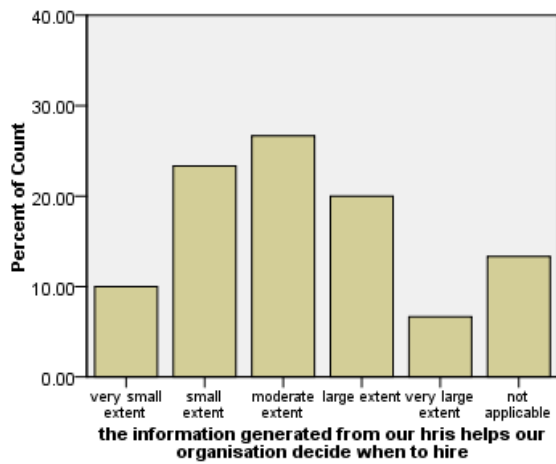
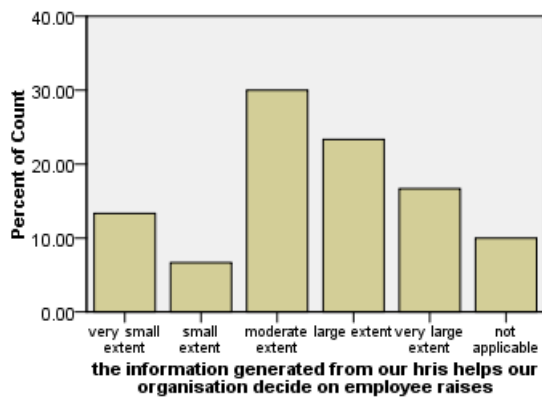
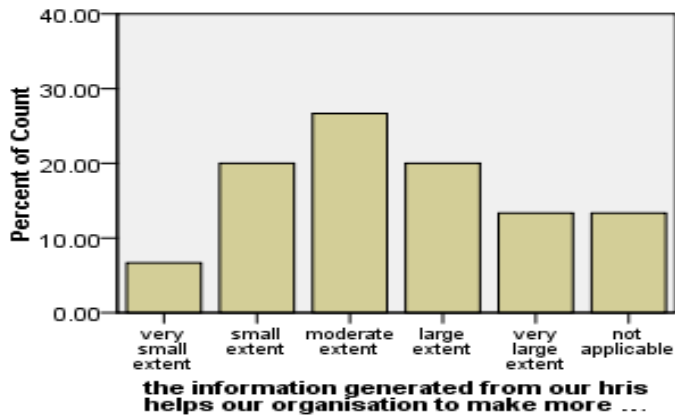
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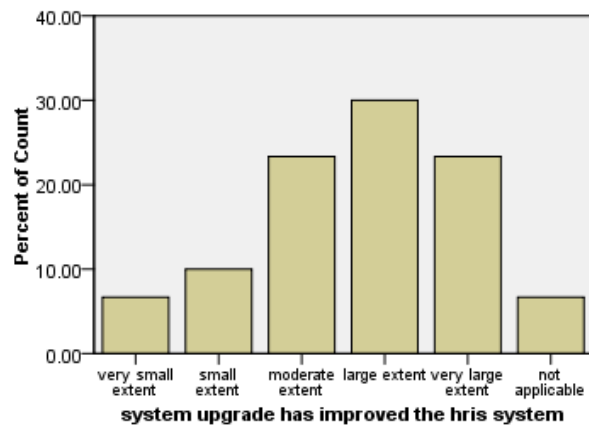
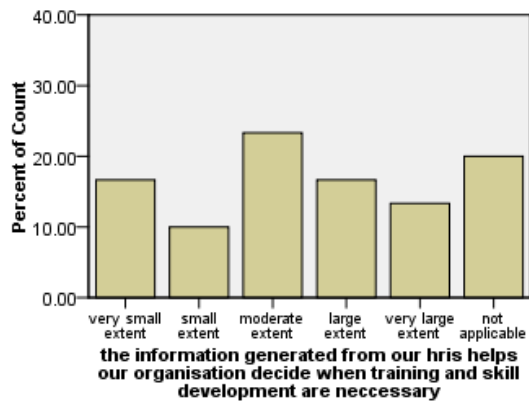
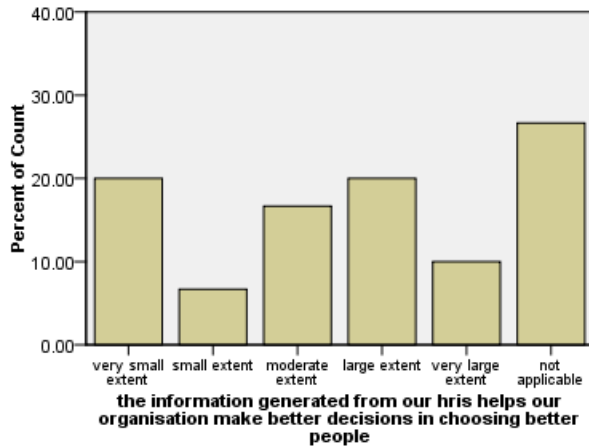


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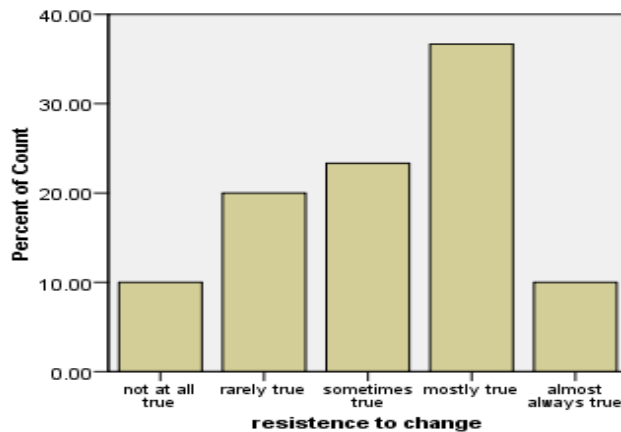
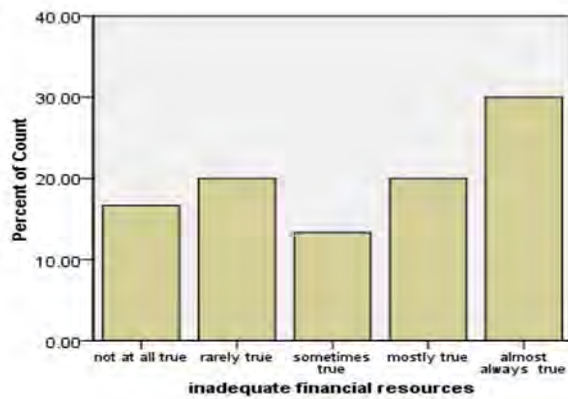


4.6 SECTION E

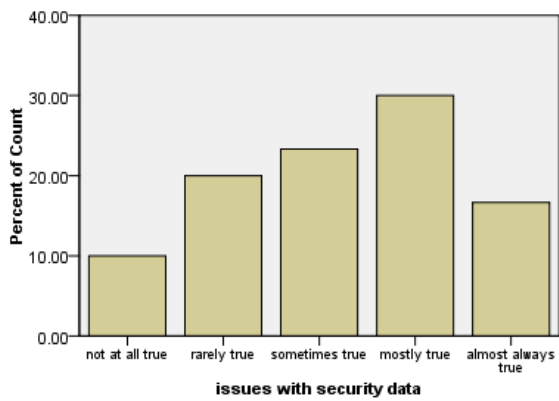
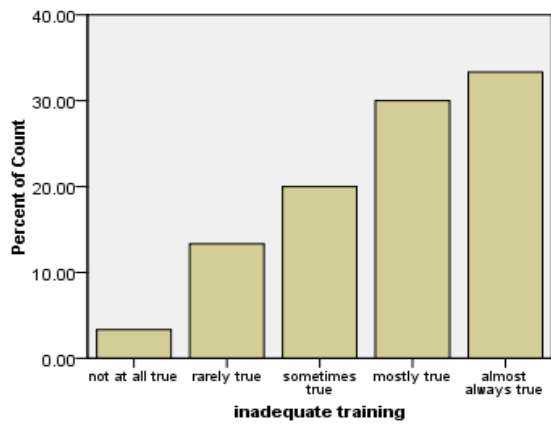
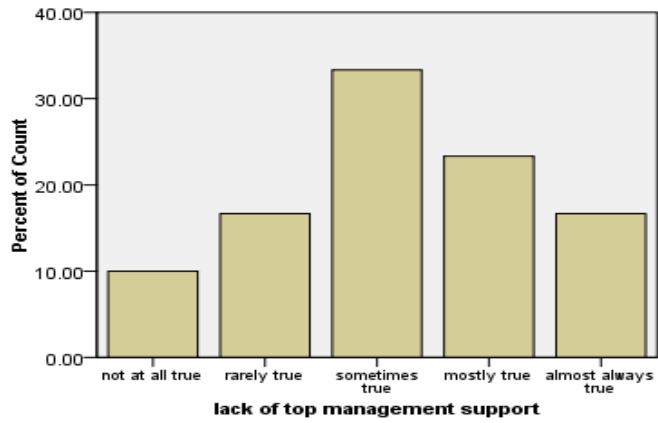
This section sought to identify the various challenges that could be encountered as a result of using HR technology, looking back at the literature review, Megha (2014) was of the opinion, that only big organisations will be able to afford standard HR technologies, because of its cost implication. Kakabadse (2006), spoke about how HR technologies will have to be

accepted by employees, in order for it to be fully utilized, because of some employee's resistance to change. The likelihood of data getting into wrong hands, was said to be high according Kaur (2012), when he spoke about the issues with security data, because data becomes obtainable by almost everyone in the work place.

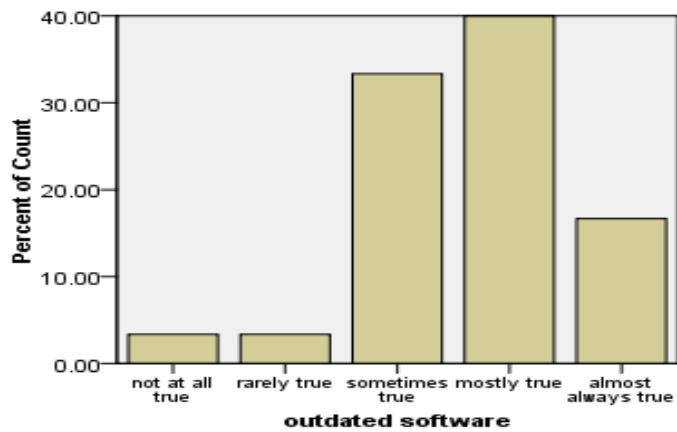
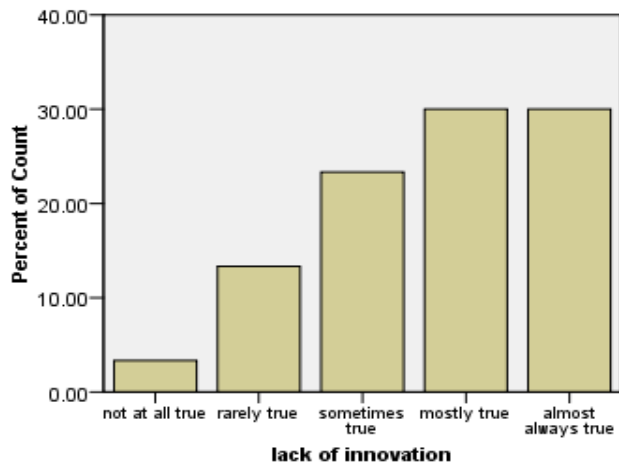
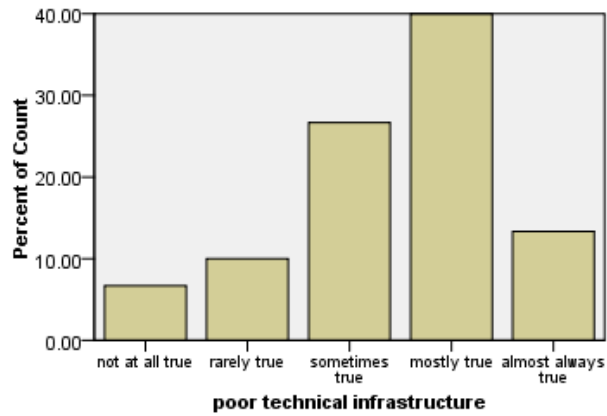
Ten challenges were being stated, and the respondents were asked to select the challenge peculiar to them. The Likert scale was also adopted, using a scale that ranges from 1 – 5. 1 – 1.4 = not at all true; 1.5 – 2.4 = rarely true; 2.5 – 3.4 = sometimes true; 3.5 – 4.4 = mostly true; 4.5 – 5.0 = almost always true. As illustrated in the bar charts in the analysis below, most of the responses from the data shows that the organisation for a fact encounters most of this challenges as the responses were mostly true and almost always true. Below is a graphical representation of this section.



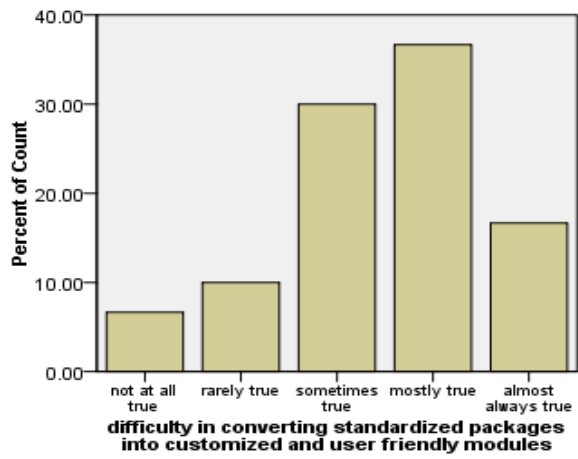
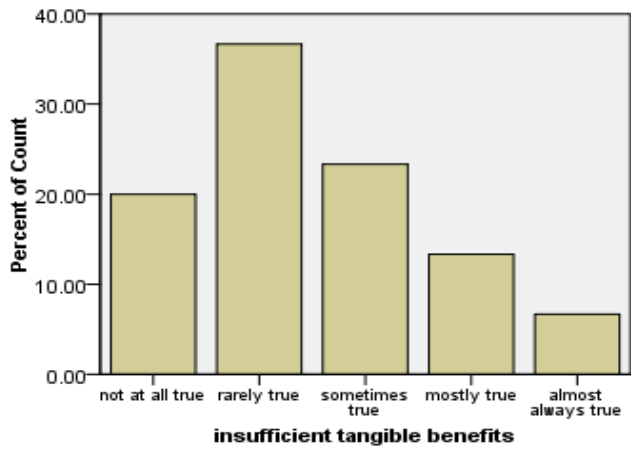
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CHAPTER 5

5.1 DISCUSSION, CONCLUSION AND RECOMMENDATION

This chapter looks into the conclusions that can be drawn from the results of this dissertation, the researcher will also answer the research questions put forward, and offer some discussions and recommendation revolving around the research performed.

5.2 THE VARIOUS TECHNOLOGICAL TOOLS USED BY EMPLOYEES AT HEADHUNT INT

The survey, sought to identify the technological tools used in the organisation (Headhunt Int.) which is one of its objective. In an attempt to do so, the survey listed out some technological tools, from which the respondents were asked to identify the tool being used in the organisation and from the results of the analysis, Microsoft applications, email, google applications, tele-conferencing and the internet had the highest mean scores, which goes to show the large use of this tools in the organisation.

Microsoft dynamics AX, is a Microsoft application that provides HR, with the core administrative tools to enable them manage employees and departments more effectively- Microsoft (2013). Microsoft office outlook integrates time, and attendance with Microsoft office outlook 2007 and 2010. It's an add-in program which enables one to create and save vacation request in the outlook, the request will then be sent automatically to the business portal for the manager's approval Microsoft (2010). According to Susannah (2006), emails are being used to communicate with board members or committees, when their feedback is needed, to coordinate upcoming meetings and send out notification to employees.

One of the most widely recognised names in business software is google. It provides quality programs and services for business. Google apps users have access to hundreds of other cloud-based apps that can help HR professionals to manage everything from payroll and accounting to invoicing and product management. Google (2009), has advised that when choosing a HR software, the package that provides the best solutions for business and works with budget should be considered.

There was a time when the only possible means of keeping contact with subsidiaries in organisations was either through long distance calls or direct flights to branch offices. This practice was said to be expensive and waste of man power resources for reasons being that,

the person who has been sent on the trip cannot be physically present in the office and so his or her post remains unproductive while away. Similarly, matters attended to via the phone may not be decisive especially if the decision was made by a handful of people considering that it might be impossible to move a whole team of people to a different location. This led to the introduction of tele-conferencing as a solution for such Wing (2000).

An American research showed that, 79% of companies globally, use the internet for seeking new personnel, because it helps save cost of recruiting, it's a faster means of recruitment Peter (2003). This explains why these tools are being employed in various organisations as they make administrative work much easier Venkatesh et al (2000). The next set of tools which has a mean score range of 3.5 to 4.4 is the websites. This is being used as a clearing house for shared information and also serves as a communication tool to reach the general public Susannah (2006). While Portable document file (PDF), is a de facto worldwide standard for platform independent distribution of books, brochures, catalogues, and other types of literatures Nilles (1998). Adobe on the other hand is a software that allows users of different computer system to transfer a document from one computer to another without any change on how the document looks on the screen or when printed. Adobe preserves colour, fonts, graphic elements and the layout of a document and reproduces them accurately Dash (1999).

According to a consulting study (2012), 89% of HR professionals use spreadsheet applications such as, Microsoft excel for salary structure design. Organisations are advised to launch several Excel practical application courses, and resources so as to help HR professionals to properly manage and analyse high volumes of data Employee test (2013). Johnston et al (2000), stated that if spreadsheet will be used to track employee data when transitioning from spreadsheet and paper forms to HR software, it is important to carefully evaluate features and match them with the organisational needs. At one time, an adding machine or electronic calculator was a standard piece of equipment found on office desktops. Today, however, spreadsheet software programs are used to perform fast, accurate and complex calculations that are impractical, if not impossible to do with a calculator. Not only can spreadsheets perform basic addition, subtraction, multiplication and division, they also make available many financial, scientific and statistical mathematical

functions as well. In addition, files or programs can be printed or saved as a spreadsheet or workbook file for reference or later use Allen (2002).

Human resource professionals, wants to recruit and retain the best talent possible, depending on the HR discipline. Workplace surveys can assist in understanding the impact of current programs and policies, while allowing identification of areas for improvement. Surveys can help employees' roles, work, and performance to business goals, survey results will shed light on the metrics you want to track and you'll have the deliverables you need to present your progress-Survey monkey (2013).

Employee engagement is an important driver of organizational success. When employees are engaged with their work, they're more fulfilled, more productive and more motivated to create satisfied and loyal customers. Measuring engagement can appear to be a daunting process Venkatesh et al (2000), but Survey Monkey has partnered with the Society of Human Resource Management Foundation to create a fast and easy way to assess employee engagement, identify successes, and determine where there's room for improvement Survey monkey (2012).

The cloud applications are extensively used in HR as Human Resource Information Systems (HRIS). John (2010), define it as a style of computing, where massively scalable IT enabled capabilities are delivered as services to external customers using Internet technologies. Cloud technologies, if used appropriately, can help to reduce costs of data storage, can help to process faster and greener in work. Companies wants flexible, scalable, reliability in work. Most importantly security is a major concern for the organization sensitive data, which organisations are reluctant to disclose Saloni (2013).

The final category of technological tools, fell under the very little or not at all range, which goes to show their less or no use in the organisation. Extranets said to be underused by members because they do not take the time to visit the online site. Network coordinators found that their membership was unaware of new documents or information posted to the extranet Susannah (2006).

Zoho is an online presentation tool that helps in creating and delivering presentations. Due to this, presentations can be made on the go, new ideas can be applied instantly. In addition, the presentation can be reviewed, edited, shared and delivered conveniently.

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In as much as technological tools supports HR administrations, they also have their downsides, listed below are the negative characteristics of some of these tools Susannah (2006).

TECHNOLOGICAL TOOLS	NEGATIVE CHARACTERISTICS
Tele – Conferencing	<ul style="list-style-type: none"> - It is more expensive than some other ICT tools. - Communication can be difficult if participants do not speak a common language well. - There’s a high possibility of having technical problems with sound. - There’s mostly difficulty initially, especially when participants have not met face-to-face before.
Email	<ul style="list-style-type: none"> - Sending out emails with information in a PDF file (such as an electronic newsletter) is mostly futile, as a lot of people would not open the email. - If the information is more than one click away, readership drops. - Sometimes people have too many emails and miss messages, sometimes key emails get deleted, and sometimes emails get misplaced in email folders. - Email effectiveness depends on the person receiving the email to organize and manage their own email system. - If documents are sent by email, the user may lose track of the latest version of a document. - Low social presence.
Survey Monkey	<ul style="list-style-type: none"> - Not good for long or complicated surveys. - No ability to clarify questions or Interact with the respondent.
Websites	<ul style="list-style-type: none"> - Employees are not aware when the website has been updated or a new section has been added unless they regularly visit the website. - There is the challenge of bringing members to the website on a regular basis.

Extranet	<ul style="list-style-type: none">- Networks found that the majority of employees did not log onto a special website. There is the sense that employees do not like to use passwords.- A survey revealed that just 5 out of 30 employees used the extranet.- Network members may need training to learn how to upload or download documents and navigate the extranet.
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Susannah (2006)

5.3 THE HR TECHNOLOGICAL PRACTICES IN THE ORGANISATION HEADHUNT INTERNATIONAL

One of the main objective of this study is to identify the various HR technological practices employed in Headhunt International. The results from the questionnaires, therefore showed that a large number of the employees, agreed to practice these HR technological practices to a large extent.

HR practices was defined by Rao (1999), as any practice which deals with enhancing competencies and commitment. It can take the form of a system, process, activity, an accepted or expected habit or just a way of doing things. He is of the view that, good HR practices makes a difference in terms of business effectiveness, and will need to be identified, so as to properly implement and also review them from time to time in order to enhance their effectiveness.

It should be noted that, the technology industry has been investing in high involvement HR practices, so as to retain and motivate information technology professionals Samson (2010). Using technology to carry out this practices makes it easier to implement Alina and Rob (2008). Technology has also enabled employees to work faster, smarter, and has increased productivity because of the increased accessibility to information it provides Henle and Blanchard (2008). HR practices therefore include, recruitment and selection.

Due to improved and technologically based HR Practices, organisations can recruit employees via the Internet. Through this method, job offers are made visible to everyone and it enables the company to have many different applicants. This system helps the manager to process the applications he receives and track internal and external data. It also

monitors recruitment expenses Gerhart (2010). Other HR practices are Payroll management, Leave management, Attendance management, communications, Training and development, Performance management, Induction, selecting benefits, Compensation planning, Competency mapping, Career planning, Maintaining employee records, Termination and Employee incentives Bauer (2004).

From the results of the survey, the HR technology practices had a higher percentage in either agree or strongly agree which goes to show that technology is being used in carrying out this HR practices in the organisation. Tapia (2006) however, is of the view that the technological advancement in HR practices, has also brought an onslaught of unintentional and unforeseen challenges, by creating new forms of negative behaviour amongst employees in the organisation, such as surfing non work related sites during working hours. Weatherbee (2010) also supported this view by adding that some employees play games, perform personal banking online, and update personal blogs/websites during working hours, for reasons not related to work.

Weatherbee (2010) called this behaviour cyber deviance, while Johnson et al (2004) called it cyber slacking. Lim et al (2005) and Lim (2002) saw it as cyber loafing, and Churchman (2003), stated it to be a personal technology usage and internet abuse. The issue of computer misuse at workplace during work hours is a concern for HR professionals Mastrangelo et al (2003), because it's a hidden cost to the organisation, when it is supposed to actually reduce cost in carrying out HR practices.

A study by Lim (2005), showed that employees who engage in this behaviour, cause the organisation a lot of loses in terms of productivity. Most organisations had fired some of its employees, because of such behaviours Case et al (2002) and Greenfield et al (2002). This deviant behaviour has negatively affected production in the work place Henle and Blanchard (2008), which is also a dimension of work place deviance Robinson and Bennett (1995). In as much as HR technology practices are being implemented, such behaviours need to be curbed and managed effectively or else the essence of using technology in HR practice will be defeated Ferris et al (2010) and Lim and Teo (2009).

5.4 THE EXTENT TO WHICH HR TECHNOLOGY EASE ADMINISTRATIVE DUTIES

Snell et al (2011), pointed out that HR technology can potentially reduce administrative cost, increase productivity, lower speed response times, improve decision making and also enhance customer service simultaneously. HR technology has made it easy and fast when it comes to gathering, collating, delivering information and communicating with employees, and most importantly, it possess the ability to reduce administrative burden on HR departments Stone et al (2006).

This is actually one of the research questions which aimed at determining the extent to which HR technology has gone to ease administrative duties. Some statements were being made and the respondents were asked to indicate the extent to which they agree with the statements made. From the results of the analysis, the results showed that technology has indeed been able to ease administrative duties. In as much as technology has reduced administrative work, the implementation of HR technology has been said to affect HR staff and employees Gardner et al (2003). Employees who have been used to working with HR professionals face to face, may find it difficult to use the computer to complete assigned task or answer questions Ashbaugh (2002), because they will miss the high touch feeling of working with HR staff.

From the analysis, the reduction of paper work had a high mean score of 4.1, which shows how much the burden of administrative duties have been reduced, but Aston (2012), is of the view that as HR content are being made more available online, the need for personal contact between HR staff and employees will reduce and this can make it difficult for effective communication to occur and can also weaken the relationship between HR and employees. Valverde (2010) and Tansley (2009), suggested that HR executives should consider the impact of this distancing, and take measures to mitigate it.

5.5 THE CHALLENGES ENCOUNTERED AS A RESULT OF USING HR TECHNOLOGY

Even in the field of HRM, technology has not only contributed towards the paradigm shift, but has also brought along with it, various challenges and opportunities Lievens and Chapman (2010). These challenges are what the researcher is particular about in this section. The last section of the questionnaire (section E), was aimed at identifying the challenges faced as result of using HR technology. From the analysis, it's been shown that

the organisation encounters most of the listed challenges, even though some challenges are being faced more than the other. Bohlander and Snell (2009), stated that the biggest challenge that organisations face, is the adoption and acceptance of HR technologies, as the re-designing and re-engineering of the HR function is very critical for the effective functioning of the various functions. Resistance to change, which was one of the challenges had a high percentage, which goes to show how much of a challenge it is to the organisation. Bondarouk et al (2009), stated that there's a challenging task of adapting workplace, to rapid technological changes which tend to influence the nature of work and as with any change in the workplace, technological changes may lead to anxiety and even resistance among employees. With regards to outdated software, which also had a high percentage score from the analysis, Vorobyov (2005), was of the view that a computer that runs faster with great deal of storage space and high resolution graphics capability, is useless without a software that fits the organisational needs, it is therefore important to keep the software up to date. Technology has made the world smaller and faster through the internet, ideas and large amount of information can now move freely at a fast rate and constantly, but it has become a challenge for HR managers, as they lack the ability to innovate Bennett (2009). The HR managers need to make good use of the technology they have, and make it to be a viable and productive part of work setting and tool Marler (2009).

There's a need for Training for the HR professionals, as inadequate training has been a challenge. The process of training and adapting to new E – system could be a difficult and time consuming process, and the users will find it challenging if this systems are not user friendly Carolina et al (2014). HR professionals therefore, need to place a priority on management to organise trainings for the HR personnel from time to time, so that they will be able to convey their expectations and outcome of the training Lengnick (2004).

HR managers have an important role to play when it comes to managing information and securing privacy information as security data has become a challenge in HR technology Carolina et al (2014). As technology in an organisation advances, so does the privacy and security concerns linked to those technology also changes Jones et al (2005). Bassellier (2003), argued that employees should be trained on how to secure data, and prevent the breach of privacy to keep business information secure, while Lengnick (2004), is of the view that communicating with technology vendors, and keeping an up to date with the technical

aspects of the organisation, are the major ways of keeping track of data security and thereby making sure it's secure.

Finally, we can see right from the evolution of HR technology, that there has been various changes which have occurred right from paper base, to the use of PCs, and despite the benefits and efficiency of HR technology, it still possesses some imperfection. Even though HR technology are very reliable and viable, as the technological tools are being put to use, some mistakes can be made in HR practice by employees when it comes to entering data. In as much as HR technology has been able to ease administrative duties, it still need the human hand to perform some functions Lievens and Chapman (2010).

A software for instance does not work alone but need to collaborate with the human hand Michael (2008), and while entering information in the software, anyone can make mistakes which brings about error in the information input, and this kind of error could lead to important damages Bohlander and Snell (2009). In as much as HR technology has been said to save cost, software and its implementation are very expensive and not all businesses can afford it, especially small businesses that will also need to be maintained Jones et al (2005).

Using computers and software to deal with HR can make the managers to care less about the human character and so decisions could be made with disregard to the person in question. This subsequently creates a gap between the employees and HR professionals who will use HR technology to hide behind computers.

5.6 CONCLUSION

From the survey conducted, the primary research showed that HR technology has been able to reduce administrative burden on personnel thereby curtailing overdependence paper work. On the other side, the secondary research showed how HR technology has been able to transform traditional HR by the introduction of E-hr, making it possible for work to be made simple, where instant feedback can be gotten thereby saving time. It further showed that, administrative work can be conveniently achieved through use of technology. Key administrative issues like, recruitment and selection, communication are now easily achievable through the deployment of technology thereby reducing administrative burden. Both the primary and secondary research, were affirmative in identifying various challenges

which are being faced by HR technology. From the foregoing, it can be firmly said that the research questions in this study has been answered.

From the secondary research, it can be deduced that researchers anticipate that the large use of HR technology can enhance the performance of HR professionals thereby getting them involved in organisational activities. So can it be said from the survey, as the organisation makes use of technological tools in large percentage, and also indulge in HR technological practices.

From the above discussion, it is apparent that HR technology cannot be used in isolation. It requires the human element (which is the most important asset of an organisation) to make it functional. It is also clear from the foregoing that, technology seems to be the order of the day. It can therefore be said that in as much as technology is needed and useful, the human element that will man or operate these technological devices is still important. The fact remains that technology compliments and not necessarily replace skilled labour Michael (2006) and Byars and Rue (2006).

Finally, it can be observed from this study, that technology can only quantify, but will not be able to prove quality. This explains why HR professionals would always be needed. Another flaw from the use of or dependence on technology is the fact that it discourages face to face interactions through the use of internet thereby discarding the conventional communication method. This may affect employees as distrust may set in.

5.7 RECOMMENDATION

It can be construed from the research that, communications among the HR division in general is very low and infrequent, even though they matter in every aspect of work. Based on this observation, it is therefore recommended that an organisational structure that seamlessly integrates and promotes strategic communication between HR and other employees should be implemented Marc (2013).

Similarly, the study goes to show the increasing influence of technology on the work of HR professionals, which is why Hempels (2004), recommends that IT content for HR purposes should be included in academic curricula because, students need to leave the universities well prepared for the various challenges they will encounter from HR technology. This is

because the EHR is not a topic for today alone, as its influence will definitely not decline in the near future Cedarcrestone (2012).

Agarwala (2003) also stated that even with the evidence of the increasing use of HR technology by organisations, there has been little theory development in this area and the academic world has failed to give the impact of technology on HR in organisations the attention it deserves.

As HR technology increasingly becomes an important factor of the HR function, researchers should deepen their understanding of the opportunities and challenges that HR technology brings. This is because HR technology may be a key enabler which allows HR professionals to fulfil the business and strategy partner roles. Though there are some investigations that revealed that HR technology does not improve HR performance to be more cost efficient centre as seen from the research Haines and Lafleur (2008). This might be caused by the low acceptance of the IT systems among target users, inappropriate choices and so on.

Dessler et al (2004) is of the view that the HR technology tools that should be employed at work are those that employees are familiar with. The simpler the tools, the better the performance. For instance, Email is perfect because almost everyone knows it and also has it Dessler et al (2004). Employees should also be thought how the tools should be used.

Resistance to change has been a challenge in HR technology. Employees sometimes see the changes in technology as a threat. They imagine their roles in the organisation will be replaced by a machine or a computer that can do the job cheaper and faster.

It is therefore important to develop strategies that will combat this challenge. This should be done by letting employees know their worth and meaningful place in the organisation. Employees should be trained to see technology as an aid and not a hindrance to their work Bondarouk (2009).

Tele-conferencing, as seen from the research is one of the technological tools used in the organisation and Susannah (2006), suggest that a biography and contact information should be created for member groups who intend to have a tele-conferencing either for meeting purposes or virtual recruitment purposes. This is because people feel more comfortable communicating with each other, if they have a background information on the person they

are contacting virtually. Willard (2010), also contributed to this by adding that, appropriate adjustments should be done in a situation where there are members who speak other languages other than English. Also, longer time schedules should be established for interaction to allow them read through documents and respond as they will need to express their thoughts in a way that they will be understood.

5.8 SUGGESTED POINTS FOR FURTHER RESEARCH

1. This research can be conducted across industries and organizations in the same or similar industry.
2. This study also can be carried out across internationally.
3. A similar research should be carried out but this time with a larger sample population to gather more insights.
4. For further research, a qualitative approach should be used also to get a deeper understanding of the concept of HR technology among employees as a whole in the work place and not limited to HR alone.
5. The study was limited in the sense that majority of the respondents (employees) were non-management staffs. Further studies should be done on a broader spread between management, supervisor and non-management to be able to receive different views and feelings.

CHAPTER 6

REFLECTION ON LEARNING

6.1 INTRODUCTION

Reflection on learning is a means of tracking the personal growth of the researcher in the course of a study. The primary aim of this, is to focus on the objective of learning and determine to which extent the issues learnt were assimilated and understood. It's just not a descriptive writing, but it's also an opportunity to make an insightful reflection on the issues learnt.

According to the various learning styles, a person can either be an activist, reflector, pragmatic or theorist. These qualities reflects in varying degrees even though one of them may be dominant than the others. After taking the Honey and Mumford test on the learning styles, during a lecture on personal and professional development at school, I realised that I'm a reflector. I portray signs of being a reflector, this is because I think from various perspective and ponder on a topic longer than necessary sometimes. I adopt an inclusive approach Honey (2014).

6.2 SELF APPRAISAL

This research has indeed been a promising journey, which I can confidently talk about. Initially, I was overwhelmed by the volume and magnitude of academic work that I was confronted with. I began doubting my self-worth and capability. However, with resilience and deep rooted commitment to the programme, coupled with encouragement from my supervisor, I was determined to pursue the programme to its logical conclusion. With the renewed commitment, I then removed every form of negativity and focused more on being positive which greatly assisted me throughout this research. I learnt a lot of things I had no idea about especially on HR technology. I also gained tremendous insight from the MBA program as a whole.

After my first meeting with my mentor MR. Martin, I became more confident of my capability to write the thesis. With Mr. Martins encouraging remark that I had good topic and that my objectives were well set out (after guiding me on rephrasing some of them properly), I began to work on thesis with a fresh zeal and determination.

In retrospect, I believe I've done a fair or commendable job of structuring the research even though I was almost running out of time because of the delay encountered while retrieving the questionnaires. I can also say that my writing skills has greatly improved as a result of this study. Consequently, I have acquired research and analytical skills which I was deficient in prior to the commencement of this study.

One of the outstanding strength I acquired during this program is my adaptation to individual study and team work. The working groups sessions made me understand that I have to listen to other people and respect their views and opinion. When working alone I have to deal with myself alone and so it sometimes becomes difficult to judge the work done. I was almost beginning to panic at one point when I began to compare myself with my colleagues on how far they've gone. Later, I realised that we are not working on the same topic and comparing myself with them will keep stressing me out or make me complacent. I then decided to stop the comparison and set deadlines for myself. I believe there's always room for me to improve if I was to do the research again.

During the research, I had the opportunity to learn the use of the SPSS software, through the help of a support class I requested from the school. It was a great and wonderful experience learning how to work with the software in analysing data. Acquiring such knowledge was self-fulfilling and an asset, as it will be useful to me in future.

6.3 PROBLEM SOLVING

From the very beginning, I began to face the challenge of setting out a particular topic I wanted to work on, I was confused on what path to follow, as I had written down three topics and wanted to choose one from the three. I had to consider the viability of each topic, the organisations which I intend to use as case study, the research already done on these topics, the availability of academic literatures and finally, of what importance it will be. After carefully looking into these factors, I was able to come up with a topic. With the guidance and assistance of my Supervisor the topic was rephrased and adopted as my chosen topic.

Coming up with a research question and setting out my objectives was also a bit tricky as I had a lot of objectives and research questions which I had to narrow down so as to make my

research achievable. I found myself being behind schedule most of the time, despite the time plan I made for myself, but I had to put in extra effort to work on schedule.

A challenge I also faced was the fact that I found myself sometimes drifting away from the set out methods of doing research, since it's the first time am conducting a study of such and also owing to the fact that the educational system back in Nigeria is different from what I experienced here in Ireland. Another challenge was the temptation of putting in my own ideas, but my supervisor pointed out on several occasions that it's not about my ideas, but the ideas of well researched authors. He reiterated the need to use academic literatures related to my work as against my ideas at any point. This also made me understand the importance of academic literature available to guide my dissertation.

If I was given the privileged and chance to do this research one more time, provided there is sufficient and maximum time and resources, I will take this research study across many industries. This view is premised on the fact that I noticed in the course of this study, that some organisations might have preference as to which technological tool they employ, it would be educating to know why the use of such preference and also to be able to compare how various organisations put in HRT technology into practice. I will also start in time and make sure I keep to my time plan.

6.4 SUMMARY OF ADDED VALUE

In the course of this reflection exercise, I noticed I was driven by positivity. Looking back at my place of work where I do a part time job as a sales person, I noticed that whenever my supervisor employ fear as a tool to get things done, it always backfires and I tend not to perform throughout that period. Meanwhile I am much more productive when I am not intimidated but driven by self-motivation.

I have realised that I need to learn how to work under adhoc situations and deliver results in unpleasant situations too. This exercise has changed the way I perceive things and made me more pragmatic. It is much easier to do a task than thinking of doing the task, as I was anxious about doing my dissertation and also doubt my ability to go through with it. However, as I began, I learnt through the process and now I can say I'm a different person than I was when I started this research. This reflection exercise has got me into thinking and has helped me appreciate the whole dissertation process.

6.5 PLANS TO APPLY/SUSTAIN LEARNING

It would be a fallacy to say I learnt nothing during the research. I've learnt a lot, even though applying what I've learnt might be yet another challenge. All the skills I've learnt and acquired will be tested in the corporate world, even though it takes a lot of practice to break an old habit and build a new one. I plan to sustain the ability to work in any situation without tagging myself as a particular person who restricts possibilities. I also intend to sustain the need to keep moving on as I work because time is not my friend. I am conscious of the fact that I might not also have someone to guide me as I had my supervisor. So there is therefore the need to ensure that the knowledge acquired is greatly put to use, by impacting same on organizations back home where I come from (Nigeria). This is considering the fact that a lot of organisations still carry out HR practices without the use of technology which makes it time consuming and stressful, while some of those who employ the use of technology either have outdated software or lack personnel with the required knowledge to use such technologies. Finally, I plan to sustain the act of always reflecting on myself as it help me grow into an efficient person in future.

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APPENDIX

QUESTIONNAIRE COVER LETTER

HR TECHNOLOGY SURVEY

Emily Ezra Yakusak

35 Russell down,

Russell square,

Dublin 24, Tallaght

RESEARCH PROJECT FOR A DEGREE IN MASTER OF BUSINESS ADMINISTRATION (HRM STREAM) (TOPIC: EXAMINING THE RECENT TECHNOLOGICAL CHANGES IN THE ASPECT OF HRM PRACTICE: A CASE STUDY OF HR PRACTITIONERS IN HEADHUNT INTERNATIONAL)

Dear Respondent,

I am conducting a research on the above topic, for the purposes of contributing to best practices in this particular area of study. This is being done as part of the course requirements for the degree of Masters in Business Administration for which I am registered at Dublin Business School.

Human Resource technology is very important in organisations. Simply put, it comprises the use of a system that allows management and employees access to human resource related information and services through an organization's intranet or web portal. This study was conducted to identify the technological tools used by employees, to understand the employee perception about HR technology and to be able to ascertain the extent to which HR technology has gone to ease administrative duties in the organisation (Headhunt Int.) This survey will go a long way in giving me a better understanding of the practical aspect of HR technology in organisations.

I invite you to participate in this research study by completing the attached surveys. The following questionnaire will require approximately five minutes to complete.

All of the information filled in this questionnaire is only for the academic works, which do not harm the security of respondents, and they will be kept as confidential information. Every opinion and information of respondent is worth for this research, so the accurate and complete data is needed for the accountability and reliability of this research. Participation is strictly voluntary and you may refuse to participate at any time or omit any question you prefer not to answer. Thank you for taking the time to assist me in my educational endeavours.

Please fill every question in the questionnaire carefully.

Thanks for your participation.

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Yours sincerely,

Emily Ezra Yakusak

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RESEARCH QUESTIONNAIRE

AN ASSESMENT OF HR TECHNOLOGY

A CASE STUDY ON HEADHUNT INTERNATIONAL

SECTION A: Demographic information

Please answer the following questions, by ticking in the appropriate box your responses will be used for statistical purposes only. Confidentiality is guaranteed.

1. Age group

20 - 35	36 - 44	46 – 50

2. Gender

Male	Female

3. What is your current job level?

Management	Supervisor	Non-management

4. Number of years of experience at Headhunt Int.

0 – 2 years	3 – 5 years	6 – 10 years	More than 11 years

SECTION B: The various technological tools used by employees at Headhunt Int.

Please which of these technological tools do you employ, in your work at Headhunt Int. (tick the appropriate box for each tool)

Technological tools used	Very often	often	sometimes	Very little	Not at all
1. Microsoft applications					
2. Email					
3. Websites					

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4. Google applications					
5. Extranet					
6. PDF applications					
7. Adobe					
8. Zoho presentation					
9. Tele-conferencing					
10. Spreadsheets					
11. Wikis					
12. Survey monkey					
13. Video text					
14. Cloud					
15. Internet					

SECTION C

The HR technological practices in your organisation. Please identify the various HR technological practices employed in your organisation by placing a tick in the appropriate box, which will show whether or not you agree with the following statements.

Listed below are a number of possible HR practices that uses E-technology in your company.

HR technological practices	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. Recruitment and selection.					
2. Payroll management.					
3. Leave management.					
4. Attendance management					
5. communications					
6. Training and development					
7. Performance management					
8. Induction					
9. selecting benefits					

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10. Compensation planning					
11. Competency mapping					
12. Career planning					
13. Maintaining employee records.					
14. Termination					
15. Employee incentives					

SECTION D

The extent to which HR technology ease administrative duties.

To what extent do you agree with the following statement?

(Where 1= Very small extent; 2 = Small extent; 3 = Moderate extent; 4 = Large extent; and 5 = Very large extent) 6= Not Applicable. Please kindly tick the box that suits your response.

Extent of HR technology	1	2	3	4	5	6
1. Our E-hr has improved the recruitment process						
2. Our E-hr has improved the training process						
3. Our E-hr has improved the data input process						
4. Our E-hr has improved the data maintenance process						
5. Our E-hr has helped with forecasting staffing needs						
6. Our E-hr has decreased paper work						
7. Our E-hr has improved our ability to disseminate information.						
8. The information generated from our HRIS has added value to the organisation						
9. Our HRIS has made our HR decision-making more effective.						
10. The information generated from our HRIS helps our organisation to make more effective promotion decisions.						
11. The information generated from our HRIS helps our organisation decide on employee raises.						

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12. The information generated from our HRIS helps our organisation decide when to hire.						
13. The information generated from our HRIS helps our organisation make better decisions in choosing better people						
14. The information generated from our HRIS helps our organisation decide when training and skill development are necessary						
15. System upgrades have improved the HRIS system						

SECTION E

The challenges encountered as a result of using HR technology.

Listed below are a number of possible HR technology challenges faced at the work place. Please, kindly select any of the challenges which is peculiar to your company.

Challenges faced	Almos t alway s true	Mostl y true	Someti mes true	Rare ly true	Not at all true
1. Inadequate Financial Resources					
2. Resistance to change					
3. Lack of top management support					
4. Inadequate training					
5. Issues with security data					
6. Poor technical infrastructure					
7. Lack of innovation					
8. Outdated software					
9. Insufficient tangible benefits					
10. Difficulty in converting standardized packages into customized and user friendly modules					

Thank you, for your earnest cooperation.

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