THE IMPACT OF HUMAN RESOURCES INFORMATION SYSTEMS IN SELECTED RETAIL OUTLETS IN WESTERN CAPE

by

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DECLARATION

I, Emmanuel Udekwe, declare that the contents of this dissertation represent my own unaided work, and that the dissertation has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

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Signed   **Date**

ABSTRACT

Human Resource Information Systems (HRISs) are systems that merge Human Resources (HR) and Information Systems (ISs) for a fast, easy, and convenient way of operating and reporting the human and material resources in an organisation. The retail sector is an important and active sector in terms of its job creation and a major contributor to the economy.

This research focuses on the level of impact HRISs have in the retail sector by reassessing its functions, problems, prospects, and benefits to the retail industries. This research further focuses on two retail outlets that use HRISs to explore how effective HRIS implementation is, the benefits these systems are able to offer, and its contribution to the organisation.

A multiple case study was used as research strategy. Interviews and semi-structured questionnaires were conducted to collect the data. Data was analysed using summarising, categorising and thematic analysis. The problem statement is that *HRISs are difficult to implement and maintain and as a result, organisations cannot effectively utilise these systems to their benefit*. The aim of this research is based on exploring how HRISs can be implemented and maintained in order for organisations to gain the expected benefits of the system.

The contribution of the study is a proposed guideline for retail organisations to assist in the effective implementation and maintenance of their preferred HRISs. All ethical standards as required by CPUT were followed. Consent was obtained in writing from the companies as well as the interviewees.

Keywords: Human Resource Information Systems; HRIS; E-HRM; Implementation; Retail Sector; Benefit; Western Cape.

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GLOSSARY

A number of key terms which have been used throughout the research study are clarified below:

Term	Definition/Description
Strategic Human Resource Development (SHRD)	A form of strategically developing human resources through the process of effective training in order to meet the objectives set by the organisation (Naris, 2009).
Performance appraisal	A method of assessing the performance of individual employees to determine if they perform their duties as expected (Usman, Fan, Anwar & Hussain, 2014:110).
Legislative compliance	A way of making sure that proper conduct (i.e. processes done according to government legislation) is followed within an organisation (Doherty & Norton, 2014:134).
Recruitment	Refers to the overall process of attracting, selecting and appointing suitable candidates for jobs (Jalloh, Habib & Turay, 2015:129)
Incentives	Refer to something that motivates an individual to perform an action (Black, 2015:131).
Business recovery procedures	Procedures that are put in place by companies as backups to safeguard their systems in case of disaster.
Intricate process	Refers to an important process that is followed to performing certain functions that are very important to the company (Troshani, Jerram & Hill, 2011:474).
Relevant information	Refers to information kept by an organisation which is regarded as important for the business (Chugh, 2014:149).
Non-compliance of timelessness	Refers to a situation whereby employees are not able to submit their documents before a cut-off date (Vărzaru & Albu, 2014:15).
Consolidation	Refers to the merging of two or more processes into one (Chrabieh, 2011:60).
System upgrades	Refers to the regular update of a system in order to be current (Dusmanescu & Martinovic, 2011:35).
Employee self-service (ESS)	Refers to a system whereby employees are given access to work on the company's system to capture their information by themselves (Heikkilä, 2013:239).
Management self-service (MSS)	Refers to the process were the managers are allowed to view, work on and sign information captured by their employees in the ESS module (Heikkilä, 2013:239).

Term	Definition/Description
EMPS (finger prints)	A system where the finger prints of employees are used to verify any criminal records and blacklisting.
Kronos system	A Human Resource Information System used to control the time and attendance of employees; it allows the use of fingerprints or passwords to gain access.
Neptune	A system that is used by some organisations to conduct recruitment.
Nakisa	A system used in some organisations for talent management processes.
Modus operandi	A Latin phrase approximately translated as "method of operation". The term is used to describe someone's working habits (Ghosh, Manuja, Sehrwat & Banerjee, 2014:319).

LIST OF ACRONYMS

ATS	Applicant Tracking System
BPA	Business Process Automation
BPM	Business Process Management
CIPD	Chartered Institute Of Personnel Development
CHRIS	Clearn's Human Resource Information System
DSMS	Data Stream Management System
E-HR	Electronic Human Resource
E-HRM	Electronic Human Resource Management
ERP	Enterprise Resource Planning
GDP	Gross Domestic Product
HR	Human Resources
HRD	Human Resource Development
HRIS	Human Resource Information System
HRM	Human Resource Management
HRMIS	Human Resource Management Information System
IS	Information System
IT	Information Technology
MIS	Management Information System
SAP	System Application Products
SARS	South African Revenue Service
SCOT	Social Construction of Technology
SHRM	Strategic Human Resource Management
SIHRM	Strategic International Human Resource Management
TAM	Theory of Acceptance Model
TOE	Technology-Organisation-Environment Model
UTAUT	Unified Theory of Acceptance and Use of Technology
WIP	Work in Progress
HOD	Head of Department

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

The management of human resources in a complex environment such as the retail industry is a challenging task (Rana & Hossain, 2014). The Human Resource (HR) department is responsible for the management and coordination of all information relating to the organisation's employees. This is a complex environment to manage and the information of employees must be kept safe and secured (Ngaochay & Walsh, 2015). Retrieving employee information should be done in a secure way, giving the right information at the right time and in the right format. To achieve this, an effective Human Resource Information System (HRIS[1]) should be implemented and maintained (Arora, 2013).

According to Akpaloo (2010), some of the reasons why companies are not effectively and efficiently using their HRIS are the lack of management support, inadequate funding, and low staff involvement in the HRIS implementation processes. These identified problems create a brick wall that prevents the effective use of HRISs.

Davarpanah and Mohamed (2013) identify trust as a significant component in managing human resources and the implementation of an effective information system (IS) in an organisation.

According to Zafar (2013), the lack of proper information security is one of the problems that can negatively affect the use of HRIS. The lack of proper security may result in the injection of computer viruses, hacker attacks and malpractices which could disrupt the information in the system and may even give competitors and outsiders access to their information (Mohite, 2012). This security risk factor creates a negative impact on the effectiveness of an HRIS in an organisation.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

Most retail sectors contribute to the economy because of the profit they make and their size both in the workforce and operations (Sorescu, Frambach, Singh, Rangaswamy & Bridges, 2011). The size of an organisation's workforce and operations determines the usefulness of the HRIS implemented (Kapoor & Goyal,

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[1] For clarity HRIS will be used in singular form while HRISs is the plural format

2014). The need for an HRIS drives the demand for Information Technology (IT) in the HR department (Bal, Bozkurt & Ertemsir, 2012).

HRIS is regarded as a valuable tool to create a core competitive advantage for an organisation (Kumar & Parumasur, 2013). Many organisations do not have the ability to utilise their HRIS effectively and by neglecting the needs of their employees, lose the benefit HRIS offers to the organisations (Arora, 2013).

HRIS is a strategic planning tool providing information that is used to forecast the demand and supply of the required workforce (Saka, 2013; Al-adwani, 2013). It can assist the employers in retaining the right employees if utilised effectively (Stone, 2011; Obeidat, 2012; Slavić & Berber, 2013). With HRISs seen as a strategic tool, the involvement of management is critical to successfully implement and maintain the HRIS (Haladay, Sergio, Opulencia & Antiado, 2015).

The strategies that the management of an organisation is expected to accomplish in the effective implementation of an HRIS are recruitment, reward, training, and development strategies. Adopting these strategies are difficult tasks to accomplish (Chitere & Gachunga, 2013). Challenges that organisations face when implementing an HRIS include the lack of information sharing within the organisation, the lack of regular upgrades of the system at a specified period of time, and not being able to apply and utilise the HRIS to its full potential (Mukherjee, Bhattacharyya & Bera, 2014). Organisations find it difficult to implement and maintain HRISs and as a result cannot effectively utilise the system to their benefit.

1.3 RESEARCH QUESTIONS, SUB-QUESTIONS AND OBJECTIVES

The following research questions (RQ) and sub-research questions (SRQ) were develop in order to explore the impact of HRISs on retail organisations in the Western Cape. The objectives of the questions are also presented.

1.3.1 Research Question 1

RQ1 with SRQs, the objectives, and the research method used are as follows:

RQ1: What are the reasons for organisations not implementing Human Resource Information Systems (HRISs) effectively?

SRQ1.1: What factors affect effective HRIS implementation in the retail sector?

The objective of SRQ1.1 is to determine the major factors that affect effective HRIS implementation in the retail sector. The research was conducted by means of two case studies using semi-structured questionnaires to conduct interviews.

SRQ1.2: What strategies have organisations achieved in HRIS implementation?

The objective of SRQ1.2 is to explore the different strategies that organisations follow when implementing an HRIS. Furthermore, the question is posed in order to determine whether the strategies do contribute to the successful implementation and effective use of the system. The research was conducted by means of two case studies using semi-structured questionnaires to conduct interviews.

1.3.2 Research Question 2

RQ2 with SRQs, the objectives and the research method used are as follows:

RQ2: How do organisations utilise HRISs in order to achieve the benefit thereof in the retail sector?

SRQ2.1: What are the HRIS modules the retail sector uses to have an effective system in place?

The objective of SRQ2.1 is to identify the HRIS modules used by organisations in the retail industry. The research was conducted by means of two case studies using semi-structured questionnaires to conduct interviews.

SRQ2.2: How do organisations use HRISs in their decision making processes?

The objective of SRQ2.2 is to establish how the system impacts on the management decision making process. The research was conducted by means of two case studies using semi-structured questionnaires to conduct interviews.

1.4 AIMS OF THE RESEARCH

The aim of this research is to explore how HRISs can be implemented and maintained in order for organisations to gain the expected benefits of the system. A further aim is to propose guidelines for the implementation, maintenance, and use of an HRIS in the retail sector.

1.5   SUMMARY OF LITERATURE REVIEW

There has been a change in the role HR plays within organisations since the introduction of HRISs in the early 1900s (Yadav, 2014a). HR originated as a clerical function and changed into a strategic partner in the planning and control of HR functions for organisations to achieve their HR objectives. Technology through the HRIS created a tool to assist the HR department in achieving its goals and objectives. Literature on HR is available in abundance.

For this study, several data bases were interrogated using keywords such as *Human Resource Information System*, *HRIS*, *HR in retail*, *HRIS modules,* and *HRIS benefits* to research the problem statement. Databases such as Google Scholar, Scopus, Emerald and Digital Knowledge were accessed through the Cape Peninsula University of Technology's website.

1.5.1   Introduction

According to Kavanagh, Gueutal and Tannenbaum (1990) as well as Methuku and Ramadan (2013), HRIS history originated from the payroll systems in the late 1950s and continued into the 1960s when the first automated employee database was created. Methuku and Ramadan (2013:498) further identified a "true" personnel system as a system that is not just appended to payroll, but also having other functions that relate to the performance and management of all the information and documents relating to employees in an organisation. The HRIS functions referred to in this process are the recruitment, wages, salaries, administrations, and benefits.

1.5.2   Definition of HRIS

Kumar and Parumasur (2013:862) define an HRIS as "a system that is used to acquire, store, manipulate, analyse, retrieve, and distribute resources". In other words, it is not just computer hardware and software, but also includes people, forms, policies, procedures, and data, all in one. Kumar and Parumasur (2013) further state that an HRIS is regarded as a key management tool that is used to collect, maintain, analyse, and report all the personal information of employees and their performance. HRISs integrate all the important information relating to data and documents that are not properly sorted or seen as important and then coordinate and sort it all into a meaningful and helpful format that will be easier to retrieve when needed.

Shaikh (2012) mentions that in an HRIS, data integration is performed at two levels: firstly at a macro level where data such as statistical information (employed

population) is stored (at the macro level the information is generally available to the public). Secondly, at a micro level, data and information are stored internally in an organisation. Such information, for example, training and development, recruitment, vacant positions, and number of employees, are all stored in the system. The information is retrieved from the HRIS only by authorised users. HRISs safely store the HR information for and when it is needed, irrespective of when and where it originated (Kananu & Nyakego, 2015).

1.5.3 HRIS characteristics and benefits

According to Akpaloo (2010), HRISs are used to facilitate the provision of quality information to management for effective decision-making. Most notably, it supports the provision of executive reports and summaries of information that management needs for decision making. An effective HRIS can assist in the facilitation of strategic value generation by making it easier for organisations to perform the design and implementation of internally consistent policies and practices to ensure that human assets contribute to achieving business objectives (Boateng, 2007; Troshani *et al.*, 2011).

The HRIS is also part of the organisation's Management Information System (MIS) which includes other functions such as accounting, finance, marketing, and production (Carrell, Elbert, Hatfield, Grobler, Marx & Van de Schyf, 1999; Kumar & Parumasur, 2013). HRISs also contribute towards the successful implementation of an Enterprise Resource Planning (ERP) system by allowing the integration of all the HR operations to the ERP system (Mohan, 2015). The HRIS creates an ecosystem where human resource operations can contribute to the competitive advantage(s) of the organisation (Kariuki, 2015).

HRISs have many benefits, including the following.

- *Internal control*: Internal control of employees, for example, leave, sick days, maternity leave, training requirements, and payroll are important to the organisation. When a payroll is prepared by the Accounts department, the HR department re-evaluates the payroll—to make sure that no differences exist (fraud and error prevention)—before it is sent for approval and final payment to individual employees. Without an effective HRIS, such an error will not easily be detected.

- *Fraud:* The high rate of employee fraud experienced by companies results in executives finding it difficult to manage the business. HRISs create environments where information is easily extractable in order to prevent

fraud. However, Magdaraog-Jr (2014) mentions that with the high rate of employee fraud, companies find it difficult to have confidence in the use of computers and software such as the HRIS. Magdaraog-Jr (2014) states the need for more investigation into an effective implementation of such systems that will help to identify any form of malpractices and fraudulent activities in relation to payroll and other HR operations. According to Zafar (2013), there is a need for further research on HRIS security to ensure an efficient and trusted HRIS. HRIS and e-HR security are major contributors to an effective enterprise system (Zafar, 2013). The lack of trust has been recognised as one of the main reasons for an ineffective HRIS in an organisation. Davarpanah and Mohamed (2013) state that any system implemented without trust will not be effective. There is a need for proper investigation into what has to be done with regard to trust in HRISs and among the users (Duc, Siengthai & Page, 2013).

- *Whistle blowing:* Whistle blowing is a contentious issue within companies. Privacy and retribution are considered challenges for employees who consider blowing the whistle on fellow employees in the company. According to Wood and Brathwaite (2013), the HRIS creates a whistle blowing mechanism and other control measures to detect any form of fraud and malpractices in the retail sector.

- *New applicants*: Nalla and Varalaxmi (2014) mention that the HRIS also assists in assessing the history of new applicants' previous job experience by conducting comprehensive checks on the references indicated by the applicant to determine the validity of the information provided.

According to Shiri (2012), HRISs are complicated and difficult to operate. The HRIS helps to align HR practices with the organisational strategy to identify improvement areas and keep up to date with the current practices (Doherty & Norton, 2014). It allows an organisation to assess and evaluate any gaps or potential risks associated with HR functions and increases the commitment of HR professionals on a continuous basis.

Chitere and Gachunga (2013) mention that the adoption of an effective HRIS requires certain strategies such as recruitment, training, development, and reward strategies. Al-adwani (2013) adds that an organisation aiming to have an effective HRIS in place will have to identify what it intends to achieve in the implementation process and what the HRIS will contribute towards effective Strategic Human Resource Management (SHRM) practices. Yadav and Dabhade (2014) state that for

an effective SHRM to be in place, management needs to view the HRIS implemented as support to their management decisions in order to function as an effective system in the organisation.

According to Nawaz (2014), the HRIS is introduced to assist the HR employees in their duties and improve their job performance and satisfaction. However, these achievements have not yet been accomplished by users. Effective HRIS implementation can offer both direct and indirect benefits to users and the organisation in the form of employee job satisfaction and low personnel turnover. These benefits are still not reaped by the system users and the organisation itself (Maier, Laumer, Eckhardt & Weitzel, 2013).

1.5.4 HRIS users

There are three groups of people that interact with the HRIS: HR professionals, functional managers, and HR employees. Without effective interaction between the HRIS and these three groups, there will not be an effective HRIS in place (Ahmer, 2013). The traditional paper method of keeping HR records has been inefficient (Chugh, 2014). The introduction of HRISs is an extremely valuable resource in terms of employee record keeping and as contributor to the company's competitive advantage (Kariuki, 2015). The benefits that HRISs offer to organisations are still difficult to measure and many organisations still regard any cost to be incurred in the maintenance of this system as irrelevant (Kumar & Parumasur, 2013).

1.5.5 HRIS practices in the retail sector

The retail sector is involved in buying goods and services from wholesalers in large quantities, breaking it into smaller units, and selling the goods and services to the end consumers (Sorescu *et al.*, 2011). According to Nalla and Varalaxmi (2014), the retail sector contributes to the development of a country's economy in the form of reduction in unemployment and increase in the Gross Domestic Product (GDP). This makes HRIS implementation an important asset to organisations and the economy.

Employee fraud in the retail sector is one of the major obstacles that can cripple organisations. There is a need for further investigation into the issue of fraud and data error (Wood & Brathwaite, 2013). HRIS practices help to improve the performance and profitability of firms in the retail sector (Diop & Yorote, 2014). Joseph (2014) identifies recruitment, talent retainership, building reputation, and human relations as the major challenges facing HR professionals in this sector.

Arora (2013) indicates cost, competency, replacing human with computer, and absence of continuous updating as the problems affecting the role HRISs play in the retail sector and causing a high rate of dissatisfaction of the system. The strategic management and integration process that is implemented will determine the effectiveness of the HRIS used in the retail sector (Bhuiyan, 2013).

Scarcity in the demand and supply of skilled HR professionals in the retail sector affects HR practices. There is a need to look at the reasons and causes of these scarce skills (Khatri, 2015). Shiri (2012) mentions that for an HRIS to be effective in the retail sector, there should be required modules which are efficiently utilised in the HRIS.

1.6   RESEARCH DESIGN AND METHODOLOGY

In this section, the research design and methodology is briefly discussed under the following headings: research philosophy, research approach, research strategy, data collection, and data analysis. The section concludes with the ethical stance taken for this research.

1.6.1   Research philosophy

According to Norman and Kabwe (2015:218), a researcher should be aware of "the philosophical foundations of his research problem, also have an idea of what the nature of the problem is, the methodology to be used and finally be able to demonstrate the philosophical approach to follow in solving the problem".

A research philosophy correlates to "the development of knowledge and the nature of that knowledge" and is concerned with the nature of science which relates to the *ontology*, *epistemology,* and *methodology* of the research (Norman & Kabwe, 2015:218). Ontology and epistemology influence the way in which the research methodology is formulated. Greener (2011) as well as Du plooy-Cilliera, Davis and Benzuiedenhout (2014) also identify three methods of applying philosophy in research: *epistemology*, *ontology* and *methodology*. Furthermore, Terre Blanche, Durrheim and Painter (2009) state that a research philosophy is conducted through a research paradigm. A research paradigm is regarded as the practices and thought that lead the way to identify the nature of the information required by the researcher to conduct the study, and could also be used in various research approaches to solve an existing problem (Knox, 2004:124). An HRIS is a practical and existing system, which means this research is conducted based on the social phenomena of an existing problem. According to Babbie (2010), the reasons why research is

conducted include exploration, description, and explanation. This research study is able to fulfil the mentioned reasons and also contributes to the body of knowledge.

1.6.1.1 *Ontology*

Greener (2011:4) defines ontology as "the theory of being, a situation where we need to find out what actually exists and what is expected to exist in a real context".

According to Saunders, Lewis and Thornhill (2009) as well as Norman and Kabwe (2015:218), ontology is considered as a nature of reality which is based on either subjectivism or objectivism. Norman and Kabwe (2015:218) went further to say that subjectivism is "a social phenomenon which is created from the ideas and perceptions of those actions that are concerned with the existence in a real world".

Allison and Pomeroy (2000) state that if there is accurate information of knowing what actually exists in a real life context, then the answers to all the research paradigms are already available and there would be no need to conduct any research. The ontological approach of this research is subjectivism.

1.6.1.2 *Epistemology*

Greener (2011:4) defines epistemology as "the theory between an actual knowledge and what is regarded as a good knowledge". This is a form of knowledge that differentiates between what we do know and what we intend to know by conducting research.

Descombe (2010) states that epistemology is the way humans create their knowledge about their social phenomena, irrespective of what exists in the real world; this could be solved either through an objective or a subjective approach. This research study is founded on interpretivism.

1.6.2   Research approach

For this research study, an inductive approach was followed based on the interpretive paradigm chosen. The study proposes recommendations as a guideline that may be used to implement an efficient and effective HRIS in retail organisations (Descombe, 2010). The findings lead to the reasons, explanations, an understanding of why HRISs should be implemented, and the benefits of using the system. In no way does the study represent a deductive approach and there is no attempt to generalise the data.

1.6.3 Research strategy

A multiple case study using semi-structured questionnaires was employed as qualitative method to conduct the research. According to Yin (2003:12), "a case study is an empirical inquiry or situation in a real life context and can be used when boundaries between a phenomenon and context are not clearly identified".

According to Gerring (2004:342), "a case study is regarded as an intensive study of a single unit for the purpose of understanding a larger class of (similar) units. A unit is also regarded as a partly bounded occurrence". Gerring (2004) further states that a case study is research that studies the properties of multiple cases and their methods, which are characterised by tracing a particular process. This method is seen as appropriate for certain types of case studies rather than the phenomenon itself. A multiple case study strategy (two cases) was adopted for this research study.

1.6.3.1 Unit of analysis

According to Babbie (2010), the unit of analysis refers to companies, organisations or subjects where, or on what, a particular research study is conducted. For this study, the unit of analysis has been identified as the two HRISs in the organisations selected as case studies.

1.6.3.2 Unit of observation

The unit of observation refers to the source where the data originates from. This research focuses on two non-random, purposive, conveniently selected retail outlets in the Western Cape, i.e. an oil and petroleum retail company and a supermarket and clothing retail company. The unit of observation in this research has been identified as the participants (non-random, purposively selected and supported by snowball sampling), who interact and use the HRIS. In the mentioned retail organisations, a total of 21 selected participants took part in the study.

1.6.4 Data collection

According to Babbie and Mouton (2001:271) as well as Saunders, Lewis and Thornhill (2009), there are different ways of collecting data, such as questionnaires, secondary data, interviews, observations, experiments, and sampling methods. Terre Blanche, Durrheim and Painter (2009) state that the objective of collecting data is to capture quality and sensible data which can be translated into credible answers to the research questions.

A semi-structured questionnaire was applied through conducting interviews to collect data from the HR employees and other employees who are directly and indirectly interacting with the HRISs in their companies. According to Hoepfl (1997), the use of a semi-structured questionnaire gives more data to work with and is geared towards the use of either a qualitative or a quantitative approach to analyse the data. Coleman, Guo and Dabbs (2007) describe semi-structured questionnaires as steps in the diagnosis, planning, controlling, evaluating, and learning specifications of the study. It is an interactive process by which a decision is taken to solve a research problem and contribute to the knowledge of science (Coleman, Guo & Dabbs, 2007).

1.6.5   Data analysis

Data analysis is the process of analysing the data collected and transforming the data into useful information for the purpose of conducting research (Greener, 2011). Data was firstly transcribed, where after it was summarised and categorised, and then a thematic analysis was done. Data validation was performed by asking the participants to view and cross-check what was transcribed in order to verify what the participant intended to say and bring across (Appendix C).

1.7   ETHICAL CONSIDERATIONS

Babbie (2010:64) defines ethics as "a general agreement that is shared by researchers on issues about what is proper and what is improper in the conduct of scientific inquiry". Ethics is a form of agreement between the researcher, the participants, and the participating company regarding the good and proper conduct of the research to ensure a developed interest among all the stakeholders regarding their participation in the research.

According to Greener (2011:64), some of the ethical issues a researcher needs to be aware of and should inform the participants of before their participation in any research, are:

- *Voluntary participation:* The participants will voluntarily participate and also have every right to withdraw whenever they want from the research.
- *No harm to the participants:* The research does not require any form of experiments, in other words, it will not cause any harm to the participants.
- *Anonymity:* The research will treat all the respondents as anonymous.
- *Confidentiality:* The research will not identify any participants in any way.

- *Deception:* The research will be conducted with honesty and truth. The participants must be informed what the research is meant for and what the expected outcomes will be.

Leedy and Ormrod (2010:101) mention a number of other ethical issues that need to be included:

- *Protection from harm:* Participants should not be exposed to any form of physical and psychological harm during the course of the research.
- *Beneficence*: The Company will benefit from the research by using the outcome as a guide towards an effective implementation of an HRIS.
- *Justice*: There will be equal distribution of risk and benefits among the participants; no discrimination.
- *Informed consent*: The participants will be informed of what the research is all about so that they can decide if they want to participate.
- *Right to privacy*: The participants will be given their right to privacy in this research.

The researcher made sure that the above mentioned issues were strictly adhered to; informed consent was obtained from the selected retail organisations. Ethical issues relating to information from an organisation is usually seen as a threat to a company's privacy. This researcher kept all the information collected from the companies confidential. The names of the companies and that of the participants were not mentioned. The semi-structured questionnaires and other documents were all encoded for the sake of confidentiality. This research did not disrupt the normal working conditions of the companies and that of the participants involved.

1.8 DELINEATION OF THE RESEARCH

This research focuses on two retail outlets in Western Cape region. The first one is an oil and petroleum company with many retail outlets and the other is a supermarket and clothing company with many retail chain stores. No other retailers where considered for the research because of time and financial constrains as well as the unwillingness of companies to participate in the research.

1.9 SIGNIFICANCE OF THE RESEARCH

This research contributes towards the body of knowledge, specifically in HRIS implementation in the retail industry. The recommendations include a proposed guideline for the effective implementation and maintenance of HRISs so as to unlock the benefits that can be derived from using these systems.

1.10 EXPECTED OUTCOMES

According to Iwu and Benedict (2013), HRIS implementation contributes to the profitability and sustainability of organisations. This research was able to explore the reasons and difficulties experienced by the two cases in the implementation and maintenance of the HRISs. The research also recommends a proposed guideline that can assist in the effective implementation and use of an HRIS.

1.11 SUMMARY

Chapter One introduces the background to the research problem and provides the problem statement by stating that organisations find it difficult to implement and maintain an HRIS and as a result cannot effectively utilise this system to their benefit. The aim of this research is to explore how HRISs can be implemented and maintained in order for organisations to gain the expected benefits from these systems. A further aim is proposing a set of guidelines for the implementation, maintenance and use of HRISs in the retail sector.

The research methods used during the study are briefly discussed—the details are explained in Chapter Three. Subjectivist ontology with an interpretivist stance has been selected. The research approach is inductive and the research strategy is a multiple case study. Data collection was conducted using semi-structured questionnaires by means of interviews (21 participants in total). Data was analysed by summarising, categorising, and applying thematic analytics.

The thesis follows the following structure:
- Chapter One: Introduction
- Chapter Two: Literature review
- Chapter Three: Research method
- Chapter Four: Findings
- Chapter Five: Discussion
- Chapter Six: Conclusions, recommendations and reflections
- References

In the next chapter, a literature review is presented that covers the impact of HRIS usage in selected retail outlets in Western Cape in greater detail.

CHAPTER TWO: LITERATURE REVIEW

2.1   INTRODUCTION

The previous chapter describes the basis and aims of this research. The problem statement and the main research questions with sub-questions are also discussed. Ethical considerations are highlighted so as to give a full view of its importance to this research and its contribution to the body of knowledge.

In this chapter, the literature is researched in order to provide an overview of the topic and seek answers for the research problem as to why organisations find it difficult to implement and maintain HRISs, and as a result cannot effectively utilise the system to their benefit. The literature is investigated using CPUT library databases such as Emerald, Scopus, Google scholar, EBSCOhost, Oxford Business Group, and ProQuest. Keywords identified from the title, problem statement and research questions were used as a guide to investigate the literature. From the literature, more keywords were added and an iterative process was followed.

The literature review is structured in the following sequence: An overview of HRM, information technology and HRM, HRIS implementation, information security, HRIS innovation, adoption of HRISs in organisations, and HRISs in the retail sector.

2.2   OVERVIEW OF HUMAN RESOURCE MANAGEMENT (HRM)

Boxall and Purcell (2003:1) define HRM as "all those activities associated with the management of employment relationships in the firm". Ridder, Mccandless and Hannover (2010:125) and Armstrong (2014:5) define HRM as "the managerial utilisation of the efforts, knowledge, capabilities and committed behaviours which people contribute to an authoritatively co-ordinated human enterprise as part of an employment exchange (or more temporary contractual arrangement) to carry out work tasks in a way which enables the enterprise to continue into the future". Armstrong (2014:5) defines HRM as "a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organisations".

Ahmer (2013:27) states that HRM is used in an organisation to achieve the following: i) planning, ii) recruitment selection, iii) employee orientation, iv) staff training and development, v) employee retention, vi) performance appraisal, and vi) staff remuneration.

Armstrong (2014:5) further highlights the following as the goals of HRM:

- HRM assists organisations in the development and implementation of an effective HR strategy that integrates with the business strategy
- HRM assists organisations in the development of high-performance culture
- HRM ensures that organisations have the skilled and right personnel to do their job
- HRM creates a committed and convenient environment for the employees and management through a mutual trust climate
- HRM ensures that proper ethical conduct is applied in the organisation

Taking the mentioned definitions into consideration, HRM could be regarded as the organised form of managing the workers of an organisation. Without HRM, companies would find it difficult to move forward. Based on the provided definitions, goals, and objectives of HRM, HRIS practices were introduced to make the performance of HRM more convenient, safe, and easy.

The present state of Human Resource Management, Strategic Human Resource Management, Human Resource Management practice, the role of HRM in achieving organisational objectives, and competency in Human Resource Management are discussed in the following sections.

2.2.1 Present state of Human Resource Management

The role of HR in the global economy is fast changing because of the way that people execute their jobs and the impact of the changing technology environment. The non-development of artificial intelligence, lack of expert systems, and lack of effective information technology are part of a number of challenges that could prevent positive change in the HR department (Sahu & Sharma, 2014:978). This orientation has created challenges for organisations, including changing the nature of managerial work, removing control, inspection, staff compliance, and reducing reliance on agency staff with technology changes. Sahu and Sharma (2014) conclude that management of the organisation needs to move with the technological changes through diversification, improvement in the quality of HR services, and attracting skilled workers. This could be achieved with the implementation of an effective HRIS.

According to Yadav (2014b), changes are inevitable in life in general, including in HRM. Yadav (2014b) conducted a study on the role of HRM based on the past, present, and future, and also on the factors that cause the changes in HRM. He

realised that because of the unprecedented growth in information systems, an opportunity has been created to develop strategic HRM systems. For this to be achieved, HRM needs to be integrated with a Human Resource Development (HRD) programme (Yadav, 2014b).

According to Hossain (2013), the improvement in ethical performance of an organisation can be achieved through the implementation of effective HRM strategies. Hossain (2013:32) developed a performance management model as a reliable form of SHRM which consists of performance management, performance improvement, commitment, employee development, motivation, and reward. For sustainability and a competitive advantage, the management needs to be aware that achieving. SHRM practices cannot be successful without the involvement of HRIS practices. Stone and Dulebohn (2013) state that a number of research studies have been conducted and theories were developed in relation to HRMS and electronic Human Resource Management (e-HRM). Yet Human Resource Management Information Systems (HRMISs) and e-HRM systems are still left behind because organisations are not reaping the benefits associated with these systems. Muriithi, Gachunga and Mburugu (2014:49) state that an HRIS "does not help leverage on the huge benefits of HRIS. If properly used, HRIS can transform how business is carried out in organisations and ultimately improve efficiency and profitability of a firm".

Mbugua (2015:100) mentions that special attention and close consideration have been paid to organisations in the last decades on the use of HRISs with regard to the performance, productivity, quality, profitability, and effectiveness; however, irrespective of the size of the organisation, results remains critical in terms of the productivity, quality, profitability, and effectiveness of HR systems. Mbugua (2015) supports the results of Esen and Özbağ (2014) who reported on the effect of organisational readiness to adopt HRM systems. They state the lack of active technical and financial resources as a key reason why HRM systems are not successfully implemented and deployed (Esen & Özbağ, 2014).

According to Stone and Lukaszewski (2009), the high demand and usage of HR systems indicates the need for e-HR systems to be in place. The implementation of such e-HR systems do however have challenges linked to their design and implementation. The research further proposes the inclusion of an e-HR model for acceptance and effectiveness in the implementation of an e-HR system (Stone & Lukaszewski, 2009:135). A significant number of companies have used the model

and admitted that it has helped them achieve their HR strategic decision; yet, they could not account for any other benefit derived from the use of the system.

2.2.2   Strategic Human Resource Management (SHRM)

According to Al-adwani (2013), to implement an effective Strategic Human Resource Management system organisations need to consider the role HRISs plays, the aims of HRIS practices, and also align HR performance with the company's objectives. Al-adwani (2013:267) identifies the following functions that companies need to consider if they want to have an effective SHRM in place: i) the HRD strategy has to be able to differentiate between skilled and unskilled applicants, ii) invent a programme to deal with the shortage or surplus in labour, and iii) identify appropriate and relevant applications from both internal and external sources for a specific job advertised.

The implementation of SHRM should be done in the following sequential order: i) vision of human resources, ii) clarifying the organisational environment, iii) reviewing of worthiness and resources, iv) checking out other strategic plans, v) goals of the organisation; and integrating operational plans (Al-adwani, 2013:267). For an effective implementation of any strategy, organisations need to analyse both the internal and external environment to be able to identify the right strategy to use.

Chitere and Gachunga (2013:3) state that in adopting a strategic HRM system, there could be an improvement in productivity, profitability, future focus, and company image, yet none of these have been proven to contribute to the success of SHRM adoption. Chitere and Gachunga (2013:7) developed a proposed conceptual model which consists of four strategies to determine the adoption of an HRIS that could contribute to organisational development. The strategies are: i) recruitment strategy, ii) training strategy, iii) development strategy, and iv) reward strategy. Chitere and Gachunga (2013) came to the conclusion that the training and development strategies are the most significant factors influencing organisational development, followed by the reward strategy and lastly the recruitment strategy. Organisational development does contribute to the sustainability of an organisation, and an effective HRIS in place is needed to achieve this.

Chrabieh (2011) mentions that for Strategic International Human Resource Management (SIHRM) policies to be implemented in the retail banking industry, the HRD department must be highly involved in the international strategic decision

making processes because of their importance to organisations and contribution to competitiveness in the global economy. The author further mentions that for such a contribution to be successful there is a need for change and cross-cultural management in HR.

2.2.3 Human Resource Management practice

HR is recognised as one of the most valuable departments and a contributor to the productivity in any organisation. Doherty and Norton (2014:128) mention that for a good HR practice to be effective, the size of the organisation needs to be taken into consideration together with a good location strategy and a management that champions both the HR department and the implementation of HR practices.

Rana and Hossain (2014:19) evaluated existing HRM practices in the banking sector and found that the lack of proper implementation of an HRIS and not giving the HR professionals the authority to participate fully at a strategic level, are the major reasons why the banking sector is not managing HRM practices effectively. The lack of participation at strategic level as well as the authority to execute strategies is stated as reasons why an unfavourable working atmosphere is created for the employees and why it becomes a hindrance to the sector's growth in terms of HR practice.

Sarker (2014) used a regression model to measure the importance of HR practices in the retail banking sector in order to identify if HR practice does contribute to job satisfaction and organisational performance. Sarker (2014) concludes that there is a need for effective HR policies which are aligned with HR practices in order to have an effective HR strategy. Sarker (2014) further mentions that for organisational growth to be measured through HRM practice, there should be a relationship between the size of the organisation, complexities, and proficient HR practice. This relationship is needed because a growing organisation needs skilled HR staff and quality procedures and policies to create effective HR practices.

Studies such as Palagolla and Wickramasinghe (2013) and Nalla and Varalaxmi (2014) confirm the existence of positive evidence that HRM practices contribute towards improving organisational performance and profitability. Palagolla and Wickramasinghe (2013:1) conducted an empirical study on how HR practices such as training, development, performance appraisal, rewards, and employee relations through employee work effort contribute to the performance of organisations. Nalla and Varalaxmi (2014:63) conducted a study that focused on the analysis of HR

practices and its relation to employee perceptions towards organisational performance.

According to Khera and Gulati (2012), the lack of effective HR planning could lead to an over- or underestimation of the number of employees required, and this could have a negative impact on the profitability and sustainability of the organisation. Khera and Gulati (2012) further mention that the introduction of an HRIS in any organisation will assist in implementing efficient HR planning by looking at the role that HRISs play in the HR planning process. A framework based on the HR planning process was developed (Durai, 2010, as cited by Khera & Gulati, 2012). An HRIS is regarded as an excellent tool for HR planning in the form of assistance in tracking the daily attendance of every employee to have an idea of how committed the workers are to the organisation (Khera & Gulati, 2012). HRISs also help the organisations that do have effective HR planning to have an idea of what each employee is expected to earn based on their work performance on a regular basis, instead of guessing or discriminating among the employees.

According to Yadav and Dabhade (2014), most organisations that want to be sustainable in the global market need to have competitive HR practices. The authors also looked at the relationship that exists between HR planning and HR audit practices. Yadav and Dabhade (2014:44) state that "HR planning is all about good management", and for that to be effective, there must be an effective strategy, effective business management, and efficient people management in place. The most important issue is to develop careful and accurate HR practices in order not to have a disorganised HR system that will negatively impact the productivity of the organisation. Yadav and Dabhade (2014:44) further state that "HR audit is to conduct a more in-depth analysis of the HR function in order to identify areas of strength and weakness and where improvements are needed". For effective HR practices to be put in place, the company has to develop an HR planning framework and effective audit practices to have an idea of how best to operate an HRD programme (Yadav & Dabhade, 2014). Employees should be part and parcel of this planning process and the HR planning must be in line with the business plan of the organisation for sustainability purposes (Yadav & Dabhade, 2014).

2.2.4 The role of HRM in achieving organisational objectives

An organisational objective is a requirement of every organisation that wants to be successful. Sultana (2014) states that in the retail sector, HRM plays a key role in

the achievement of organisational objectives. The objective is assistance towards the creation of jobs and enabling the retail sector to manage its HR effectively.

According to Sultana (2014), organised retail industries need to improve in their performance in terms of technological advancement in HR to meet international standards. Effective HRM practices assist the retail sector in analysing the current HRM practices that are already implemented by identifying HR challenges such as the lack of skill workers, lack of educated staff, workforce reduction, and the threat of poaching in a complicated HR environment. Sultana (2014) further states the need for greater attention to improving HRM practices in the retail banking sector in order to have a competitive advantage, which is one of the major required achievements.

2.2.5 Competencies in Human Resource Management

Competency refers to the skilled labour that is required by a particular organisation (Nehar, 2013:90). Competencies are requirement by any company that wants to grow and be able to compete in the world of business. Khatri (2014) identifies talent analytics as a contemporary practice of measuring the performance and management of talent in an organisation. Decisions made in organisations through the use of talent management are regarded as actual facts and figures. Talent analytics is regarded as one of the most critical components in an effective decision making process of an organisation (Krulj, 2014:55). Khatri (2014:1) argues that "talent analytics is regarded as a toolkit for managing HR issues because talented employees are regarded as 'intellectual capital'". Khatri (2014:3) also states that a company could gain a competitive advantage by placing the right people in the right positions at the right time.

Dai and Zhou (2014:172) identify knowledge as an effective decision support system (DSS) for HRM. They further propose a model known as the 'software as a service' (SaaS) model, which consist of the following management modules:

- Organisational Management
- Job Management
- Recruitment Management
- Training Management
- Salary Management
- Labour Relation Management
- Human Resource Management
- Career Management

Dai and Zhou (2014) further state that the SaaS model has been used in various industries such as business, consulting services, and education, yet there is a need to expand it further by including more modules that will make the system suitable for other types of organisations.

Liu, Fu, Wang and Fang (2014:546) analyse the relationship between the HR professionals' competency and organisational performance, looking at both issues from the angles of winning support, effective allocation of resources, inspiration, HRM professional knowledge, application of HRMIS, and business knowledge. The authors could not predict the enterprise performance as compared to HR professional competency, which remains a problem (Liu *et al.*, 2014). Tripathi and Agrawal (2014:350) show that competency based management in organisational context highlights the retention of a competent workforce as one of the reasons an organisation is able to compete in today's global business environment.

Sharma (2014) looks at HRM with special focus on its future challenges and possible solutions in order to gain a competitive advantage by identifying challenges that could deprive companies from retaining talented skilled workers. The author identified those challenges as changes in globalisation, technological advancement, political and legal environment, and information technology (Sharma, 2014:150).

A company could motivate their workers by creating a quality performance evaluation and development plan in order to reduce skilled staff churn. Rahman (2012) mentions the impact of HR strategies and factors that contribute to the retention of professional employees, with special focus on knowledge management. Rahman (2012) concludes that it is the decision of the management to recognise the presence of the professionals in their organisation. Without recognising the presence of the skilled workers, effective HRIS implementation practices will be difficult to achieve and will have a negative impact on employee commitment and retention.

2.3   INFORMATION TECHNOLOGY AND HUMAN RESOURCE MANAGEMENT

In this section, the following topics are discussed: the role of information systems in HRM, information technology, HRIS definitions, the HRIS role in organisations, HRIS functions and their relation to policies and procedures, the impact of HRISs on organisations and HRIS use to enhance HRM.

2.3.1 The role of information systems in Human Resource Management

Dusmanescu and Martinovic (2011) suggest that modern IT and Enterprise Resource Planning (ERP) is part of IS that could be used to support HRM success. According to Slavić and Berber (2013), one of the roles of an information system is to identify the importance, advantages, and limitations of HRIS usage in organisations. Slavić and Berber (2013) use an integrated HRIS framework (Karoliny & Poór, 2010:457) to investigate the usage of HRISs in organisations and state that HRISs are still underutilised in the researched organisations. Slavić and Berber (2013) state that there are setbacks in HRIS implementation in organisations, but the benefits are foremost.

Mukherjee, Bhattacharyya and Bera (2014) state that organisations have been able to realise the importance of applying adequate IT in their HR functions irrespective of the size of the organisation. The authors report on a study of the role of IT in HRM, and focus on the use of the applicant tracking system (ATS) in HRM. An HRIS model based on the operation of ATS was developed to be able to align the recruitment process in organisations. Mukherjee, Bhattacharyya and Bera (2014) conclude that ATS is closely related to human intelligence with regard to its decision making skills of tracking the preferred candidates for a particular position available, but its disadvantage is the high cost of implementing the ATS. For HRISs to be more accessible and affordable to organisations, there should be a product developed with sufficient quality to accommodate all the organisations that want to implement an HRIS (Mukherjee, Bhattacharyya & Bera, 2014).

2.3.2 Information technology

March and Smith (1995:252) define IT as "the technology used to acquire and process information in support of human purposes. It is typically instantiated as IT systems which consist of hardware, software, procedures, data, and people, developed to address tasks faced by individuals and groups, typically within some organisational setting".

Bal, Bozkurt and Ertemsir (2012) mention that because of globalisation and an increase in demand for technology, most organisations advance in the use of information systems (ISs). HRM is not an exception, and as a result created an increase in the demand and usage of Management Information Systems (MIS). Bal, Bozkurt and Ertemsir (2012) further mention the following activities that ISs use to support HR in organisations: i) identifying potential employees, ii) maintaining complete records on existing employees, iii) creating programmes to develop

employees' talents' and skills, iv) and assisting senior management to identify the actual skills required by the organisation. The authors conclude that there is a significance difference between the position an employee holds within a company and the perception level of the employee. The higher the managerial position, the higher the perception of the value and satisfaction with the HRIS (Bal, Bozkurt & Ertemsir, 2012:61).

2.3.3   HRIS definitions

There has been a change in the role HR plays within organisations since the introduction of HR in the early 1900s (Yadav, 2014a). HR originated as a clerical function and has presently changed into a strategic partner in the planning and control of HR functions for organisations to achieve their HR objectives. With the introduction of computer and technology, HRIS practices were introduced to speed up the operations of the HR department.

According to Kavanagh, Gueutal and Tannenbaum (1990) as well as Methuku and Ramadan (2013), the history of HRIS originated from the payroll systems in the late 1950s and continued into the 1960s when the first automated employee data was created. Methuku and Ramadan (2013:498) further identify a "true" personnel system as a system that relates to the performance and management of all the information and documents relating to employees in an organisation. According to Chugh (2014:150), "a typical and most common function of HR is to store staff details such as name, date of birth, gender, address, staff number, position title, position location, salary, reporting lines and other company specific information". Methuku and Ramadan (2013) argue that the HRIS functions include recruitment, wages and salaries, administration, and benefits.

DeSanctis (1986:16) defines an HRIS as "a specialised information system within the traditional functional areas of the organisation, designed to support the planning, administration, decision-making, and control activities of human resource management". Bondarouk and Ruël (2009) state that HRIS, e-HRM, virtual HRM, web-based HRM, and intranet-based HRM are all interchangeably used. Kavanagh, Gueutal and Tannenbaum (1990:13) define an HRIS as "a system that is used to acquire, store, manipulate, analyse, retrieve, and distribute resources". The term HRIS refers to a database that contains the combination of hardware and software used to store and retrieve data whenever requested by anyone authorised to have it (Broderick & Boudreau, 1992). Bondarouk and Ruël (2009:507) define the term HRIS as "an umbrella term covering all possible integration mechanisms and

contents between HRM and Information Technologies aiming at creating value within and across organisations for targeted employees and management".

Belcourt, Bohlander, Snell and Sherman (2011) describe an HRIS as a system that develops current and accurate information for decision-making and monitoring. From the above information, it implies that an HRIS makes the task of the HRD department easier and more reliable. For this study, the explanation of Belcourt *et al.* (2011) is used.

2.3.4 HRIS role in organisations

HRIS practices play an important role in the growth and sustainability of organisations. The following roles were identified for HRIS in organisations namely , i) strategic vision and HR implementation, ii) supporting the organisational processes, iii) enabling technology, iv) usage in support of strategic HR, v) improve and advance knowledge, vi) leadership, HRM, and tacit knowledge and vii) data management.

2.3.4.1 *Strategic vision and HR implementation*

Bhargava (2014) identifies the role of an HRIS by examining the link between the strategic vision and HR implementation in an organisation in order to provide a functional integration of HRM.

2.3.4.2 *Supporting the organisational processes*

Chugh (2014) conducted a study based on the role an HRIS plays in an institution through its HR functions and the use of a position management model such as Clearn's Human Resource Information System (CHRIS). The CHRIS model assists HR in supporting the organisational key and other processes (Chugh, 2014). The research of Chugh (2014) was done on a specific organisation and it is recommended that comparative research needs to be conducted on other organisations to view HRISs from different perspectives in different organisations.

2.3.4.3 *Enabling technology*

Boateng (2007) investigates the role HRISs play in the SHRM of small, medium, and large organisations and in different types of organisations. Boateng examined the performance of HR professionals and the management of organisations as it impacts on the system. The author researched the effect of HR tasks and job performance on the HRIS. Boateng's (2007) study revealed that an HRIS is

considered to be a major support for HR tasks through the advancement of technology. The results of the survey reveal that HR professionals not only consider HRIS usage as a support for strategic HR tasks but also perceive it as an enabling technology.

2.3.4.4 Usage in support of strategic HR

The study also indicates that large sized firms are most likely to experience considerable HRIS usage in support of strategic HR tasks. Moreover, there was no significant difference in proportion to the size of a company regarding HRIS usage in support of management commitment and managing trade union relations with organisations.

2.3.4.5 Improve and advance knowledge

HRISs are more likely to improve and advance knowledge in large organisations, but in terms of usage of these systems, there is no significant difference between the small, medium, and large organisations (Boateng, 2007). Kapoor and Goyal (2014) support Boateng (2007) in their study which is based on the impact of the size of an organisation on HRIS deployment. The authors report that there is no significant difference in the use of an HRIS between small, medium, and large organisations. Bhuiyan (2013) claims that most companies still regard HRISs as more of a routine than a strategic task. According to Kapoor and Goyal (2014), every organisation that is able to implement an HRIS can gain benefits from the system through strategic tasks and decisions made possible through the HRIS.

2.3.4.6 Leadership, HRM, and tacit knowledge

Methuku and Ramadan (2013) conducted a study based on the role that HRIS practices play in connection to leadership, HRM, and tacit knowledge. The authors developed a theoretical framework that is based on the way people think and act, the kind of IS used, and how it contributes to the effectiveness of good leadership (Methuku & Ramadan, 2013). Large investments are made in HRISs and the advancement thereof. Despite the investments in HRISs, Methuku and Ramadan (2013) could not measure the benefits of the implemented HRISs. The authors report that many managers are of the opinion that HRISs lack adequate information that could be useful for the organisation's leadership activities. HRISs seem to be only useful if there is an HR-oriented IS designed for effective performance.

2.3.4.7 *Data management*

Pilbeam and Corbridge (2002) present the advantages of HRISs as the speed of processing data, the reliability and accuracy of data and information, storage and retrieval of data and information, consolidation, the making of decisions, and the role and influence on the office staff.

2.3.5 HRIS functions and relation to policies and procedures

According to Boateng (2007), a functional HRIS requires active policies and procedures to follow in order to achieve a more efficient and useful system. Boateng (2007:26) lists the functions of an HRIS as integrating the technology of HR, increasing efficiency of HR, increasing effectiveness of HR, and IT-enabling processing. Armstrong (2009:1016) lists the functions of an HRIS as absence management, training, development, rewards, managing diversity, and recruitment and selection. It seems that Boateng (2007) and Armstrong (2009) view HRISs from different perspectives but the one does not exclude the other.

Mohammed (2015) argues that various policies, procedures, and practices that organisations implement for effective use of the system will go a long way to improve the quality of data and talent attraction irrespective of the size of the organisation. The HRIS needs to be tightly integrated into the policies and procedures of the organisation in order to provide quality information to management.

2.3.6 HRIS impact in organisations

HRISs impact organisations in various ways. Hussain, Wallace and Cornelius (2007) conducted a study on how the implementation of an HRIS was able to assist the management to recognise the HR proffesionals as important in terms of their inputs in the decision making body of the organisation. Hussain, Wallace and Cornelius (2007) also investigated the usage of HRISs in organisations irrespective of the size of the organisation and how the systems impact on the organisations' performance in general. The results were compared, taking into consideration the sizes of the organisations as well as the performance of companies not making use of an HRIS. Minor differences were detected in the usage of the HRISs in the small and large organisations. Improvement in the work of the HR professionals when compared to that of other departments, was found, but benefits could not be recognised because the improvement in the performance could not be identified easily (Hussain, Wallace & Cornelius, 2007). The use of an HRIS could make a difference in the performance of every organisation if it is well implemented. Organisations unable to define the

reason why they are implementing an HRIS will not be able to identify the benefits of the system even if management is satisfied with the system. HRISs need to be examined in all sectors of the economy in order to determine the impact of these systems on HR.

Periysamy and Amsa (2014:1306) highlight the impact of HRISs on the HR functions of four companies. They examined the level of the system as enabler of strategic focus within the HR functions, describing the factors affecting the system as organisational attention, complexity of HRM to technological responses, and success of change management to support the system users' acceptance. Agarwal (2015:1) observes that there has been growth in the study of change management and its critical role in HR.

Maier *et al.* (2013) analysed the impact of HRIS implementation on HR personnel by examining job satisfaction and employee turnover with the focus on e-recruitment implementation. It was found that HRIS implementation has an indirect effect on employee retention because of an increased job satisfaction rating by the employees (Maier *et al.*, 2013).

Masum, Bhuiyan and Kabir (2013) identify the impact of HRIS practices in an institution and point out that there is a gap between the present use of HRISs and the expected application of these systems which is caused by the lack of infrastructure, high cost of living, lack of HR professionals, and insufficient training. Masum, Bhuiyan and Kabir (2013) assert that there is a disparity between the expected and actual usage of HRISs, which is one of the major reasons why the benefits of HRISs have not yet been achieved.

Kumar and Parumasur (2013:863) state that:
> "…managerial satisfaction with the HRIS is enhanced when the system's advantages for management are realised, namely, the increase of overall decision-making efficiency, cost reduction and improved control of budget, business transparency, a clear business vision and a clear insight into the process of recruitment, selection and termination of employees at the aggregate level".

Kumar and Parumasur (2013) further assert that the system is aimed at making sure the HR processes are fast and efficient for management satisfaction, but if not properly implemented and used, they would not be able to achieve the expected benefits that the HRIS offers the organisation. Kumar and Parumasur (2013) claim

that the impact of an IS on HR functions could be measured by time management, cost management, managerial satisfaction, and organisational efficiency. They observe that managers have a slightly positive view of the impact of an HRIS with regard to time management and HR functions. For a well implemented HRIS, it needs to assist the organisation in generating effective information that will be reliable to the organisation and its employees.

An HRIS has the potential to assist in speeding up and producing quality information for the decision making process in order to achieve the required HR strategies. Kumar and Parumasur (2013) argue that there is a need for organisations to introduce an integrated system that will be used to align HR practices with organisational HR strategy and to assist HR professionals to partake in the strategic level of decision making processes. Kassim, Ramayah and Kurnia (2012) conducted a study on testing the past and present situation of HRIS usage in organisations with the combination of three models: i) Innovation diffusion model by Rogers (1983), ii) IT framework model by Remenyi, Money and Twite (1991), and iii) the Work of Zuboff (1988). The authors were able to develop a model that could be helpful in effectively using the system. Kassim, Ramayah and Kurnia (2012:603) state in their findings that "information technology (IT) appears to serve as an empowering function for HR professionals, providing a medium in which HR professionals can provide increased value in their work".

Laumer, Maier and Eckhardt (2014) designed a research model that combines HRIS and business process management (BPM) functions, measuring the combined effects on the performance in the recruitment process. The authors conclude that the combination of HRIS and BPM could assist organisations in improving the hiring time, the time to conduct interviews, and also other recruiting processes to follow.

2.3.7   HRIS use to enhance HRM

HRIS practices can enhance the work of HRM to increase HRM productivity. Dery, Grant and Wiblen (2007) conducted a study which focuses on HRIS use to either replace or enhance the duties of HRM in an organisation by examining the impact of HRISs on the functionality of HRD in organisations. It was found, among other, that a lack of resources needed to implement and maintain a new or upgraded HRIS, lack of management of the complication of the HRIS and its functionality, and lack of proper acceptance of the HRIS among key managers and employees, create a negative impact on the HRD functionality in the use of an HRIS. Dery, Grant and Wiblen (2007) propose a model known as '*The promise of HRIS',* consisting of three

layers—successful transformation, transaction, and effective communication—to create potential benefits of HRIS usage in Human Resource Development.

2.4 HRIS IMPLEMENTATION

According to Ahmer (2013), organisations can only adapt to changes in the implementation of a new HRIS if the new system could create a competitive advantage and the benefits of the system be measured when compared to the old system. According to Akpaloo (2010), most organisations have some challenges and difficult moments in the implementation of an effective HRIS. The author further identifies lack of management support, inadequate funding, and low rate of staff involvement as some of the factors affecting HRIS implementation.

Akpaloo (2010:5) further states that most organisations have not been able to implement HRISs successfully due to problems such as:

- System add-ons by different vendors
- Making system integration very difficult
- Information of staff members who resigned and are no longer with the organisation is most of the time difficult to retrieve
- Staff members have different HR files at the various branches and departments that they had worked, due to transfers and promotions
- Staff information updates take a long time to reflect on their records which affects the using of those data in decision making processes

Levasseur (2001) proposes two change models that could be applied to overcome the resistance to change: i) the action-research approach, and ii) Lewin's three-stage model. Akpaloo (2010:43) proposes a conceptual framework which consists of six steps when implementing an effective HRIS. The six steps are: i) develop a needs analysis plan, ii) early information inventory, iii) comprehensive information inventory, iv) information evaluation, v) develop the HRIS strategy, and vi) evaluate the effort. Akpaloo (2010) recommends that there should be a project team responsible for tracking the progress of all the HRIS implementation processes. The author also recommends that management must prepare the workers and themselves for the change that will be introduced by the new HRIS.

Jahan (2014) mentions that HRIS implementation in some countries is still at a growing stage and mostly done by the big companies. Jahan (2014) conducted a theoretical analysis of HRISs and concludes that for an organisation to have an effective HRIS, they should focus more on educating the users, training, awareness

of the use of the system, the benefits of the organisation, and regarding the system as an investment.

Ngai and Wat (2006) conducted a review and analysis of HRIS implementation in organisations based on developing countries because most organisations in developing countries still believe that quick response and easy access to information are the only benefits the system can offer to organisations. They found the lack of sufficient funds as the main problem affecting companies from benefiting in the use of the system. The study was conducted in different types of companies as well as among companies that implemented and those that have not implemented the system so as to have a clear view of the system's usage and benefits (Ngai & Wat, 2006). The study is used to give companies, HR professionals, and system users an in-depth understanding of HRISs as well as the barriers and expected benefits. The authors made suggestions for further study to be conducted on the use of internet/intranet based HRISs as it will assist in looking at modern HRISs to be more accessible than traditional (stand-alone) systems (Ngai & Wat, 2006).

2.4.1 Challenges of HRIS implementation

Stone (2011) identifies the main obstacles and challenges in the implementation of an HRIS. The HRIS should be flexible and secure. Stone also argues that the effective implementation of an HRIS will be determined by the people who are making use of the system. Furthermore, management should construct an organisational culture to support the changes that the new technology introduces into the organisation (Šušnjar, Slavić & Berber, 2013).

The lack of an organisational culture supporting the implementation of new technology hinders the adoption of such technology. Furthermore, the following challenges are faced by organisations namely i) the inability to re-engineer the business process, ii) the lack of training employees to adopt the new system, and iii) the use of unrelated information systems. Added to these challenges are the technology user acceptance of the system, understanding the user requirements, costs, employee conduct, and lack of needs perceived for HRIS implementation (Syed, 2014; Lippert & Swiercz, 2005).

Alkhowaiter, Dwivedi and Williams (2013) argue that irrespective of the benefits that organisations could derive from the adoption of an HRIS, they still have some form of difficulties in the implementation of the HRIS. Kovach and Cathcart (1999) list i) skills shortage, ii) lack of proper capital maintenance, iii) lack of management

support, iv) lack of HR professionals, and v) lack of coordination with other departments as barriers that can limit effective HRIS implementation.

There exists a need to view the implementation process as a whole in order to ensure accurate system integrity (Singh, Jindal & Samim, 2011). Bhargava (2014) states that the challenges in HRIS implementation is an area that requires further research to be conducted and identifies some of the challenges faced by organisations with regard to issues relating to technology as user acceptance of the system, understanding the user requirements, costs, employee conduct, and lack of needs perceived for HRIS implementation. Bhargava (2014) suggests that the process of overcoming these challenges is being hindered by technology, management, and the organisation itself. According to Kashive (2011), HRIS challenges and opportunities in managing today's workforce were compared using three different models: i) the model of Haines and Petit (1997), ii) the HRIS in Accenture, and iii) the Wyatt-Watson Model (2002). The author explored the advent of HRISs from administrative to strategic tasks and also as a knowledge facilitator. Kashive (2011) concludes that HRIS practices can play a very active role in knowledge facilitation and designing a system that will be used to speed up the work of the employees and also add value to the organisation's integrity.

2.4.2   Confidence and trust in HRIS implementation

Davarpanah and Mohamed (2013) identify trust as one of the major factors that contributes to the success of HRISs. Lippert and Swiercz (2005:341) define technology trust as "an individual's willingness to be vulnerable to a technology, based on person-specific expectations of the technology's predictability, reliability, and utility as moderated by the individual's predisposition to trust the technology". Lippert and Swiercz (2005) examined the relationship that exists between HRIS implementation and technology trust by developing a model that generates propositions that could be used to conduct the study in order to find out if the relationship is favourable to the organisation. It was found that higher levels of HRIS implementation success will also lead to higher levels of HRIS technology trust (Lippert & Swiercz, 2005:349).

Lippert and Swiercz (2005:345) list the following propositions that were used to develop the model, which suggest that trust in the organisation could impact on HRIS implementation: collective interdependence, organisational environment, organisational culture, technology adoption, technology usage, socialisation, and sensitivity to privacy. The authors argue that when these factors are brought

together in a favourable atmosphere, organisational trust could impact on technology trust and thereby impacting on the trust in HRIS users with regard to the success of the HRIS implementation process, and ultimately impact on the organisational success.

According to Duc, Siengthai and Page (2013), "trust" is known to be important in the management of technology for human resource effectiveness and efficiency. They proposed a model on "HRIS-trust" based on HRIS suppliers by looking at the perspective of customer relation and how they could approach their customers and convince them to buy their product. The suppliers need to convince the buyers why they need to trust the HRIS product and what the benefits of the system are—which are the major reasons why the customers want to buy the product. Duc, Siengthai and Page (2013:108) state that "trust is very important in all stages of technology management for human resource efficiency and effectiveness to improve organisational performance".

The authors conclude that an increase in HRIS trust will warrant an increase in the sustainability of HR performance. Although this model was never tested, the opportunity has been created for further study to develop the model for future expansion of HRISs.

2.4.3   Special incentives for HRIS users

According to Black (2015), the relationship between organisational incentives and employees discretionary effort is directly related. When a company increases its employee incentives and target bonuses for using the HRIS, satisfaction of the system users will also increase simultaneously, and this will ultimately increase the productivity and profitability of the organisation. Al-adwani (2013) comments that special incentives is part of a strategy for actual performance. Ellinger and Ellinger (2014) support Al-adwani by stating that aligning incentives and reward systems helps to minimise inefficient resource utilisation and non-value added activities.

2.5   INFORMATION SECURITY

Information security is an issue that every organisation needs to consider if they want to remain in business. According to Zafar (2013:106), information security, also known as computer security, is defined as "the protection afforded to an automated information system in order to attain the applicable objectives of preserving the confidentiality, integrity, and availability (CIA) of information system resources".

Confidentiality and privacy of employees' personal information is important and should not be accessed by unauthorised individuals (Wong & Thite, 2009).

Zafar (2013) conducted a study on HRIS and e-HR security with the management of information security fundamentals by showing how this can be enhanced in an organisation. The enhancement has to deal with the way security fundamentals could be used in order to create a form of *Security Bridge* to protect the system information. Zafar (2013) proposes a model in the form of factors that could contribute to HRIS and e-HR security success. The model includes: i) risk analysis, ii) training, iii) integration, iv) architecture, v) legislation, vi) policies, and vii) data evaluation. The author emphasises the need for further research on HRISs by examining the level and size of organisations and conducting a qualitative research approach as an alternative to the quantitative research that was carried out in the research.

Arora (2013) mentions that acquisition, storage, and retrieval of information are regarded as challenging to most organisations, but when they are finally able to create an HRIS database, maintenance becomes much more accessible. Organisations need to make data security and privacy of employee information a priority; this can be achieved by having a quality HRIS.

2.5.1 Personnel records in a computer environment

Personnel records in a computer system need to be carefully considered and agreed upon to make it safer and more accurate to implement. Mohite (2012) conducted a study on the impact of managing personnel records in an electronic environment through the use of an HRIS in an organisation and realised that there is a rise in the lack of compliance, lack of data protection, and identity theft. Without a technology system to run HR, organisations will find it difficult to minimise these issues, let alone to eliminate them.

Companies need to make sure that their HRIS is secure and sophisticated to deliver on their expectations (Mohite, 2012). The author states that there is dissatisfaction with HRISs regarding usage on information and information sharing in some organisations. The HRISs are also not fully utilised which might be the reasons why there is lack of effective information security in place (Mohite, 2012). The author recommends further study on the need for the inclusion of other required applications not part of the current HRIS to improve on the system in place (Mohite, 2012).

2.5.2 HRIS practices and employee fraud

According to Magdaraog-Jr (2014:73), "employee fraud involves theft of an entity's or assets committed through direct embezzlement of material and immaterial resources, or employing functions or activity that is not expected or beyond job description". Magdaraog-Jr (2014) conducted a study based on the identification of the risk factors related to employee fraud in order to guide management on the best possible way to lower the risk involved in malpractices. Fraud emerges in different dimensions and HR fraud is not an exception. Without an effective information system, fraud will always be on the increase in organisations.

Magdaraog-J (2014) concludes that some managers are not serious enough about the fraud committed by their subordinates. This is seen when companies' resources, confidential documents, records, and files are easily accessible by unauthorised individuals. This could be caused by the lack of proper job description, conflicting functions performed by one person, or neglecting the duplication of sensitive duties for checks and balances purposes (Magdaraog-Jr, 2014). Further recommendations were made that managers should be well aware of the warning signs of employee fraud and place an enormous attention to risk management (Magdaraog-Jr, 2014).

2.5.3 HRIS practices as internal control measure

Internal control is part of the HRIS objectives that need to be addressed for successful achievements in an organisation. Wood and Brathwaite (2013) conducted a study based on internal control measures in a leading supermarket were they highlighted fraud as a major consequence for most retailers irrespective of the size of the organisation. The lack of proper internal control measures and effective systems such as an HRIS creates loopholes for fraud to be committed.

Wood and Brathwaite (2013) examined the adequacy of internal control and how to detect and prevent fraud. The authors conclude that retail companies need to strengthen their internal control system with the inclusion of a whistle-blowing mechanism that will alert managers to create an employee assistance programme and reward programme to motivate the workers and discourage them from committing fraud.

2.6 HRIS INNOVATION

The effect of the global economy caused the operations of certain HR functions in the retail sector to be innovative in nature. Innovation means a new way of doing

things, of which HRIS implementation is not an exception. Garcia and Calantone (2002:112) define innovation as "an interactive process initiated by the perception of a new market and/or new service opportunity for a technological-based invention which leads to the development, production and marketing tasks striving for the commercial success of the invention". Ostendorf, Mouzas and Chakrabarti (2014) identify innovation as a way of doing things in order to create a difference that could add value to an organisation. Ostendorf, Mouzas and Chakrabarti (2014:1) state that "the ability of businesses to succeed in their endeavours to create and capture value appears to be inextricably linked with their effort to identify new and innovative exchange possibilities".

Lewis (2011) mentions that a creative atmosphere will nurture and create innovative solutions to problems in an organisation. Ostendorf, Mouzas and Chakrabarti (2014) focus on innovations as a form of leveraging their business networks and found that companies influence their human and material resources in order to create innovative retail brands that will assist them in achieving sustainable growth.

Obeidat (2012) focuses on the relationship between innovation diffusion and HRIS practices by developing a theoretical framework on innovation and HRISs as independent and dependent variables respectively. The attitude of people towards innovation could influence the use of HRISs. Companies that want to implement an HRIS should first observe the system before making the final run on the system. This study was conducted through a quantitative method in accord with Obeidat (2012) recommends that a qualitative research study be done in order to have a different view of the study.

2.7   HRIS ADOPTION IN ORGANISATIONS

HRIS adoption by organisations is a way of saying to the traditional HR practice, 'we disown you and are now adopting an automated HRIS'. This is a huge challenge and shows that the organisation is moving forward. Management commitment is a very important part of this process that assists in minimising barriers that have to do with the adoption of sustainable practices in HRIS implementation (Dos Santos, Svensson & Padin, 2013).

HRIS adoption requires the adoption of a new strategy which might rely on a new business model (Sorescu *et al.*, 2011). Ahmer (2013) states that many research studies have been conducted on the adoption of HRIS technological innovations. The author mentions that one of the reasons why most organisations are not keen

on adopting and implementing an HRIS is the large capital required (Beckers & Bsat, 2002). Cost of implementing and maintaining an HRIS is high. The cost factor is a major problem irrespective of the size of company and type of operational business.

According to Ngai and Wat (2006:229), the list of major obstacles that deprive the management of an organisation from adopting an effective HRIS include deficient staff, insufficient budget, shortage of IT support, poor time management, the need to collaborate with other departments.

According to Alkhowaiter, Dwivedi and Williams (2013), HRIS adoption is considered as a challenging issue because of the costs involved and the period of time it will take to be fully effective. The authors investigated the factors that affect the adoption and successful HRIS implementation practices in the public sector and determined that top management support, organisation size, and perceived benefits have a positive effect on the adoption process; yet, these benefits are still not perceived (Alkhowaiter, Dwivedi & Williams, 2013).

Troshani *et al.* (2011) developed a Technology-Organisation-Environment (TOE) model based on three factors that impact on the organisational adoption of HRIS practices in the public sector: i) environmental factors such as regulatory compliance and successful adoptions, ii) organisational factors such as technology competency, management commitment, organisation size, and the degree of centralisation, and iii) technological factors such as the perceived benefit/cost trade-off as well as the organisational fit. Troshani *et al.* (2011) specify that HRIS adoption is still under-researched and that the model developed will be able to give a guideline of how the environment, the organisation itself, and technology could be able to interact conveniently to make the HRIS effective.

2.7.1 HRIS adoption and information technology

In the global economy, the adoption of IT in HR has been a top priority to achieve the required objectives (Kinanaga, 2013). Much research has been done on the adoption of information technology in HR, yet some organisations are still trying to come to terms with a successful IT adoption process in HR (Ahmer, 2013).

Ahmer (2013) mentions that several studies have suggested the introduction of parallel functions between the adoption of an IS and adoption of technology to create a platform for a successful HRIS. Ahmer (2013) developed a framework

which consists of three characteristics—innovation, organisation, and environment. The author concludes the study by identifying the following as the major three hindrances to effective adoption of HRISs: i) HRISs with less functionality could be costly; ii) cost of infrastructure could be high, and iii) the lack of management support.

Having an HRIS that is adopted to suit a particular organisation is not an easy task. There are a number of reasons that could delay the adoption process for non-benefit purposes. Blount and Castleman (2009) identify that little attention has been paid to the adoption and success of HRISs and this has remained under-researched. Alkhowaiter, Dwivedi and Williams (2013) developed a model that was created from the combination of the following models: i) Unified Theory of Acceptance and Use of Technology (UTAUT), which has the constructs of performance expectancy, effort expectancy, social influence, and facilitating condition to describe HRIS adoption, and ii) DeLone and McLean's IS Success Model, which has the elements of information quality, system quality, service quality, system use, user satisfaction, and net benefit, all of which are connected to information system (IS) success.

The above mentioned models/theories are combined into a proposed model that can be adopted in order to have an effective HRIS in the public sector. They further instilled a mandatory technology adoption, performance, and effort expectancy as a significance influence on the HRIS adoption process (Alkhowaiter, Dwivedi & Williams, 2013). Looking at the adoption process from the retail sector's perspective, thus having a different view of the adoption of an HRIS may also benefit the retail industry in general.

Alalwan (2014) conducted an investigation into the recruiter's intention to adopt a social IS which is important for the HR department and forms part of the HRIS that is used to interact with other processes of an organisational system, though little research has been done on the system itself.

Alalwan (2014) proposes a model based on the combination of innovation adoption literature and institutional theory and found out that imitative pressures, forced pressures, relative advantage, and top management support all have a positive influence, while complexity has a negative influence on the system adoption. For an organisation to have an effective adoption system, it requires means to gain the benefit of the system. The research of Arpaci, Yardimci, Ozkan and Turetken (2012) as well as Troshani *et al.* (2011) focus on the organisational adoption of (IT) in

HRIS. They used the Technology-Organisation-Environment (TOE) framework of Tornatzky, Fleisher and Chakrabarti (1990) to develop their own individual framework. Arpaci *et al*. (2012) are able to show clarity on the adoption of (IT) in HRISs were management needs to visualise the progress of the adoption process from a technological, organisational, and environmental perspective.

Kinanaga (2013) focuses on IT adoption determinants in improving human resource functions by pairing well-documented IT policy framework and IT implementation procedures in an institution, and placing more emphasis on training and development in order to uplift the IT literacy levels in the institution. Kinanaga (2013) used the UTAUT model to develop a conceptual framework that is able to identify the relationship between the determinants of the adoption of IT and the improvement of HR functions as a possible reason to improve the HRIS in the organisation. A fully developed HRIS database model was developed for successful HRIS implementation. Kinanaga (2013) concludes by stating that a well-documented IT policy framework and IT adoption procedure, if implemented separately, will not have any positive effect on HR performance, but if merged, it will contribute to an improvement in HR performance. There is a need for replication studies in other organisations such as in the retail industry to have more in-depth research results.

2.7.2 HRISs and data streams

Data streaming is a form of data capturing that requires vast amounts of data to be captured accurately and in real-time in a particular system. This is part of an effective HRIS required in order to produce an error free report. The focus of Chen's (2014) research is on developing a framework for HRISs based on data streams with a high volume of data that is captured on daily basis in organisations—such as in the retail sector—that have huge numbers of employees. The record of every employee needs to be captured accurately and timely so as to monitor every person from the first to the last day of employment.

Chen (2014) developed a Data Stream Management System (DSMS) which recommends a better way to capture and manage data and information in the HR department through the HRIS system. The author finally mentions the need for further development of other application systems in HRM to improve HRIS use as there is more to do in order to achieve the required objectives of the system.

2.7.3   Current HRIS scenario

One of the most important elements of an HRIS is to be able to identify how organisations that have been able to implement the system could enhance their performance using the system (Gupta, 2013). Gupta (2013) goes further to develop an HRIS life cycle that organisations could use when implementing the system and which consists of adequate planning, analysing, designing, implementation, and maintenance. The author indicated that the HRIS life cycle will be an appropriate measure to follow in order to update the system in this day and age. (Gupta, 2013) concludes by stating that the use of a computerised HRIS is more effective than manual systems because of its accuracy and the consumption of less time and space.

DeSanctis (1986) mentions that with the assessment of an HRIS, he is able to trace the development of the system as a separate entitiy from the centralised MIS and asses the current operations which looks upon its future benefits. DeSanctis (1986) concludes by indicating that organisations are strongly interested in applying their human and material resources in order to improve the use of their HRIS.

Beulen (2009) identifies the contribution HRISs make to the progress of staff retention in the emerging global HR markets by investigating six developing countries. Beulen proposes a theoretical framework based on staff retention through the following HR functionalities: human resource planning, staff development, regulatory compliance, benefits administration, performance appraisal, and recruitment and selection. Beulen (2009) concludes that for organisations to be able to have a competitive advantage in the global economy, they should be able to include some form of locally manufactured HRIS functionalities to support the system in order to achieve success.

Davarpanah and Mohamed (2013) mention that one of the key success factors of HRISs in a tertiary Institution is trust in the system. Through the use of the DeLone and McLean model (see section 2.7.1), Davarpanah and Mohamed established arguments regarding the system in terms of information quality, system quality, service quality, structural assurance, and user satisfaction. Based on these points, Davarpanah and Mohamed (2013) were able to relay how it relates to trust and justified that trust is one of the major contributors towards an effective HR with an efficient IS. According to Marufu (2014), the lack of proper IT equipment and skilled personnel to implement and support the HRIS are major challenges. There is a need

for clear interventions to address these challenges and ultimately expand the system usage and performance.

Yadav (2014a) examines the impact IT has on HR services available to HR managers through the use of an HRIS. The author proposes two models known as the i) HRIS model, and ii) the payroll system model. Yadav (2014a) explains that this is used to show how the information goes through the HRIS from various modules in order to eliminate error from the input, processing and output of information. The author finally argues that a computerised HRIS is more effective than manual systems. Yadav (2014a) flags the need for further research on global talent and the provision of on the job training for the users of the system in order to fully benefit from the advantages of using an HRIS.

2.8   HRIS PRACTICES IN THE RETAIL SECTOR

Nalla and Varalaxmi (2014) identify the lack of skilled manpower and development programmes as the reasons why some retail outlets do not have effective HR practices for their HRM.

In this global economy, the retail industry is a major contributor in terms of employment and GDP due to the size of the companies and their level of operation (Joseph, 2014; Nalla & Varalaxmi, 2014; Sultana, 2014). The retail sector is also known as the middle party between the manufacturers/wholesalers and the final consumers. Retailers make sure that the products get to the public and users of the product at the price and quantity that they can afford to buy. HRIS implementation in the retail sector is a critical factor for sustainability and continuity (Iwu & Benedict, 2013).

Bekele (2013) states that although retailers are playing an important role in the economy, the issue of sustainability should be the core objective of the retail sector because they need to have continuity in the back of their mind in all their activities. Bekele (2013) mentions that leadership commitment, employee commitment, organisational core values, member awareness, and consumer awareness are the major drivers in the implementation of sustainable HR initiatives.

HRIS implementation in the retail sector needs to play a part in the sustainability initiatives by utilising the mentioned major drivers in an organisation to gain a competitive advantage. Ellinger and Ellinger (2014) state that organisations can

leverage the expertise of HRD in order to create and maintain a competitive advantage by providing an avenue to develop people in scarce skills.

2.8.1 HRIS usage in the retail sector

Arora (2013) investigates the importance of HRISs in the retail service sector by specifying that HRIS is not a new concept but an existing system that is growing and becoming more popular on daily basis in the business environment. The author further identifies major problems affecting the role HRISs play in the retail sector, including cost, competency, replacing human with computer, and absence of continuous updating. Arora's (2013) aim is to identify the contribution of HRISs towards effective management of various HR functions in the retail service sector and recognises a significant positive level of satisfaction in the use of HRISs in this sector. Arora (2013) suggests further research on traditional HRM and HRISs as well as determining if there is an improvement in HRIS use due to changes in time and technology.

Bhuiyan (2013) describes HRIS use in both the manufacturing and service sectors by examining the combination of HR and IS practices as becoming a normal phenomenon for organisations to survive in the business world irrespective of their size, year of establishment, and the level of their operations. According to the author, an HRIS is a system that could contribute to the strategic importance of the HR department in terms of effective and efficient operations in the industry. Bhuiyan (2013) identifies the strategic importance of HRISs in the HR department in order for organisations to be more efficient and effective in their HR operations. The author further identifies obstacles that are depriving the manufacturing and retail service companies from achieving success in HRIS use as i) lack of management commitment, ii) lack of satisfaction with the system applications, iii) no or poorly conducted needs analyses, iv) failure to include key people, v) failure to keep project teams intact, vi) politics/hidden agendas, vii) failure to involve/consult significant groups, viii) lack of communication, and ix) bad timing (time of year and duration).

The use of an effective HRIS in the manufacturing and retail service sector is dependent on strategic management and efficient integration processes implemented by companies, and requires effective development, effective implementation processes, adequate operating systems, and effective system maintenance (Bhuiyan, 2013). Bhuiyan (2013) concludes that most manufacturing and retail service industries are at present still regarding HRIS practices as administrative functions rather than strategic functions, which is a great concern.

2.8.2 Identity management in retail

According to Al-khouri (2014), the importance of identity management in the retail industry is a major challenge facing the retail sector. Identity theft is a key problem that affects retail industries in general so much that it could put some of the retailers out of business if not properly controlled. The introduction of HRISs could make it possible to synchronise and monitor employee information in the retail industry. Al-khouri (2014) suggests that an introduction of reliable identity management systems and effective credential practices should be added to HRISs. This will assist in propelling the retail sector into modern business development. The inclusion of modules that will assist the retail sector to achieve its objectives is a major focus.

2.8.3 HRISs regarded as an investment

According to Iwu and Benedict (2013), some South African firms still need to feel the impact that HRISs play in their various organisations—even in the recession period—because of the kind of business they are operating. They require some level of trust, confidentiality, viability, and credibility in order to have an effective HRIS put in place.

Iwu and Benedict (2013) further suggest that HRISs, irrespective of an economic downturn, should be regarded as an investment and not a sunken cost, but would not be appropriate for a first time investor during the economic downturn because of the high cost involved in the implementation process.

2.8.4 HRIS usage for decision making processes in the retail sector

In order to assist in the decision making processes of retail organisations, HRISs are used in educating the management of the companies in question on how the system works and how to measure performance to suit the operations of their organisation Nawaz (2014). Ukandu, Iwu and Allen-Ile (2014) mention that HRISs could be used to assess the effectiveness of information and decision support tools for the management objectives. Nawaz (2014) lists the following criteria for measuring HRIS performance in order to achieve the required objective as follows: i) human resource planning, ii) employee training, iii) employee development, iv) employment benefits and laws, v) hiring new employees, vi) position and classification, vii) skills development decisions on goal-oriented compensation management, viii) job evaluation and downsizing, ix) legal labour management relations, x) agenda setting, and xi) competitive and strategic attitude.

2.8.5   Modules in the HRISs of retail organisations

Shiri (2012) identifies the effectiveness of HRISs for HR functions in the retail and other industries by recognising that IT and ISs should be part of HR functions as this will help HR professionals in doing their work and assist in the implementation of effective HRISs. Shiri (2012) further lists the followings as the components of an HRIS: i) payroll, ii) time and attendance, iii) performance appraisal, iv) benefits administration, v) HR Management Information System, vi) recruiting, vii) learning management, viii) training system, ix) performance record, x) employee self-service, xi) scheduling, and xii) absenteeism management. HRISs might be complicated and difficult to operate, but it can assist organisations in aligning their HR practices with HR strategies, identifying areas to be improved, and ensuring that current systems are in line with the company practices (Shiri, 2012).

According to Jahan (2014:36):

> "…some organisation[s] may want to develop the payroll module while others may want more modules to be developed. It all depends on the affordability and plan of the concerned organisation. But it is an essential step before communicating with the vendor or software developers; otherwise it will create complexity during discussion and negotiation with the software developers".

Further studies can be done to determine to what extent organisations in other sectors of the economy have been able to achieve the adoption of an HRIS.

2.8.6   The benefits of HRISs

Researchers identified the followings as some of the benefits of HRIS:

2.8.6.1 *Talent management*

Talent management is one of the most important benefits of a HRIS. According to Ghosh *et al.* (2014:319)

> "…talent management engulfs the entire life cycle process of an employee from entry to exit which involves training, succession planning, compensation etc. The focus here has been laid on three critical components namely sourcing, recruitment and attrition for the purpose of mapping the important aspects associated with them".

Ghosh *et al.* (2014) further mention that talent management deals with analytics and big data that cover the entire process, from data generation and data storage to the process of conversation through analytics up to the final report generation of the data. To cover this entire gamut of strategic requirements the focus should be shifted from conventional *modus operandi* to HR analytics and big data. The

process of analytics covers the entire spectrum of data generation, storage, and conversion through the analysis of the raw data and converting it into useful information.

Wiblen, Grant and Dery's (2010) study on talent management reveals that transforming the system from a traditional HR system to the new HRIS goes a long way in reshaping HR and IT performance, and talent management contributes to this. The authors identify talent management as a highly recognised and critical factor of organisational performance in the process of transformation. In deciding to change from their stand-alone HRIS to an integrated and vendor HRIS, an organisation requires a shift in the skills and capabilities of the workers and management, and this contributes to the benefit of using the HRIS (Wiblen, Grant & Dery, 2010).

2.8.6.2 Other benefits of a HRIS

Beckers and Bsat (2002:4) list the following benefits that an organisation could achieve if they use an HRIS: i) increased competitiveness by improved HR practices, ii) delivering a greater number and variety of HR operations, iii) shifting the focus of HR from the processing of transactions to strategic HRM, iv) making employees part of HRIS, and v) re-engineering the entire HR function.

The benefits have not yet been achieved by most organisations using HRISs, although measuring the benefits of HRIS use could vary for different organisations. Beckers and Bsat (2002) add the following reasons to justify why HRISs should be used in organisations: i) to transform the role of HRM from administrative to strategic, ii) to increase competitiveness by developing and improving the activities and procedures of HR, iii) to re-organise the HRM department, and iv) to create a wider range of the HRM reports.

Blount and Castleman (2009) state that the gap in research on HRISs has been identified by numerous researchers but little attention has been paid to the adoption, success, and benefits of these systems.

According to Martinsons (1994), in a global economy HRIS usage needs to be compared globally in order to determine the differences, if any, between a developed and a developing economy, and if they are actually feeling the positive impact of the system. Martinsons (1994) uses a benchmarking system to compare the benefits of HRIS usage between the two economies to determine if HRIS

implementation could actually contribute to the comptetitiveness of the industries that utilise the system. The authors further realise that the use of a computer based HRIS is much more advanced in developed countries than in the developing countries, and this affects the various sectors of the economy. Organisations should ensure proper utilisation of the new technology by knowing the challenging and interrupting issues that go with it (David, Shukla & Gupta, 2015).

Shaikh (2012) describes an HRIS as a form of design that organisations require for business applications to be efficient and this design will be made up of the control process, system interface, and database validation in order to assist HR to minimise their work flow processes. Shaikh (2012) proposes three models to prove that an HRIS assists the HRD department in designing business applications: i) the HRIS Design Model, ii) the HRIS Hexagonal Model, and iii) the HRIS Phases Model. Shaikh (2012) concludes that an organisation can only have an effective system in place if they have an HRD strategy that is supported by an advanced IS to pilot the operations of the department. Since the use of an HRIS is expensive, companies wanting the system need to consider the use of an advanced information system for better HRIS usage.

2.9   SUMMARY

Chapter Two summarises the literature in a short overview of HRM, IT and HRM, HRIS implementation, information security, HRISs and innovation, and HRIS usage in the retail sector. Each of these topics is discussed and covered, from definitions to the benefits of using an HRIS. Consideration is given to the implementation and usage of HRISs within organisations. One of the main questions addressed in this chapter is the ability, or lack thereof, of organisations to measure the benefits of HRISs.

The following have been identified as gaps in the literature: i) limited empirical research conducted on various issues relating to the standard modules for specific industries, ii) little research is reported on the actual benefits that can be derived from HRISs, and iii) a lack of research on the benefits of HRIS usage in retail outlets in the Western Cape. The next chapter addresses the research design and methodology used to conduct this research.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter provides a discussion on the research design and methodology conducted during the study. It describes the research methods that were used and explains why these methods were selected to collate the information that was required to answer the research questions. It provides information on the various research approaches used.

According to Dennis, Joseph and Valacacich (2001), the main reason why research is conducted is to either develop new ideas to existing knowledge, or to introduce new knowledge in a scientific format. For effective research to be conducted, it needs two dimensions namely research design and research methodology.

According to Babbie (2010), the research design and methodology are used to guide the researcher on how to collect the data and analyse it accurately in order to provide an accurate solution of the study.

3.2 RESEARCH METHODOLOGY

According to Babbie and Mouton (2001:74), "a research methodology is defined as the systematic, methodological and accurate form of execution of design". Research methodology identifies the two major approaches that are used in research known as qualitative and quantitative approach. Essentially, the process of conducting a study starts with identifying the research problem and research questions, which guide the researcher in terms of the research approach. This study follows a qualitative approach.

3.2.1 Qualitative methodology

Qualitative research involves a range of interpretive techniques that seems to describe, decode, and translate the terms that occur in a social phenomenon (Welman, Kruger & Mitchell, 2006). The methods used in qualitative research assist the researcher in obtaining an insight into the social phenomenon of the investigation.

3.2.1.1 Advantages of qualitative research method

The following are advantages of a qualitative study: i) it enables the researcher to have an in-depth understanding of the research problem (Babbie & Mouton, 2001:309), ii) it interprets results easily and discovers new ideas (Babbie, 2004),

iii) it is useful to address the research objectives through variables that are difficult to quantify in figures (Babbie & Mouton, 2001; Welman, Kruger & Mitchell, 2006), iv) offers a high level of flexibility by allowing the researcher to manipulate the data collected at any given time in order to increase the validity of the findings (Babbie & Mouton, 2001; Welman, Kruger & Mitchell, 2006), and v) it assists in improving the strategic competencies of the executives (Mert, 2014)

3.2.1.2 Disadvantages of qualitative research method

The results are more dependent on the interpretation of the researcher, which makes it subjective rather than objective, which causes findings not to be generalised (Babbie & Mouton, 2001). Furthermore, the research is interactive in nature and therefore requires someone with good communication and analytical skills to report the findings in a more clarified format (Babbie, 2004). According to Hammel (2006), the research methodology is regarded as the philosophical approach used to acquire new knowledge or to develop existing knowledge.

3.2.2 Research philosophy

As mentioned in Chapter One, a researcher needs to be aware of the philosophical foundations of the research problem, have an idea of what the nature of the problem is and the methodology to be used, and finally be able to demonstrate the philosophical approach to follow in solving the problem (Descombe, 2010). According to Norman and Kabwe (2015:218), "a research philosophy is concerned with the nature of science that relates to the ontology, epistemology and methodology of a research. The two former terms, ontology and epistemology influence the way in which the research methodology is formulated".

The philosophical approach in qualitative research assists the researcher conducting the study on how to collect the data. Greener (2011) and Du Plooy-Cilliera, Davis and Benzuiedenhout (2014) identify three philosophical approaches in conducting research as follows: i) ontology; ii) epistemology; and iii) methodology.

3.2.2.1 Ontology

According to Greener (2011:4), as mentioned in Chapter One, ontology is defined as "the theory of being, a situation where we need to find out what actually exists and what is expected to exist in a real context". Saunders, Lewis and Thornhill (2009) as well as Norman and Kabwe (2015:218) state that ontology is considered as the nature of reality which is based on either subjectivism or objectivism depending on the research approach used. Norman and Kabwe (2015:218) further state that

subjectivism is "a social phenomenon which is created from the ideas and perceptions of those actions that are concerned with the existence in a real world".

Allison and Pomeroy (2000) concur that if there is accurate information of knowing what actually exists in a real life context, then the answers to all the research paradigms will be available without the need to conduct any research. Based on this premise, the research study was conducted as a qualitative study with an ontological subjectivist approach.

3.2.2.2 Epistemology

Greener (2011:4) defines epistemology as "the theory between an actual knowledge and what is regarded as a good knowledge". This is a form of knowledge that differentiates what we do know and what we intend to know through conducting research. Norman and Kabwe (2015:219) state that "epistemology is concerned with the analysis of the nature of knowledge, and what we believe to be true". Norman and Kabwe further mention that research can be conducted through an objective or subjective approach. By choosing a subjective approach, this study regards epistemology as an accepted knowledge of study.

Terre Blanche, Durrheim and Painter (2009) argue that research philosophy is conducted through a research paradigm, which is a form of practice and thought that identifies the nature of the required information a researcher needs in order to conduct the research. This means a paradigm can be used for various research approaches to acquire information that is relevant to the research. Babbie (2010) mentions that qualitative research can be conducted through three different paradigms, namely: i) interpretive approach, ii) critical approach, and iii) post-positivist approach.

The interpretive approach states that access to reality can only be obtained through social constructs such as consciousness, relationships, and commonalities (Maree, 2008:60). It assists in understanding reality through the meaning people consign to it and the perception they have of themselves. Babbie (2010) states that the objective of an interpretive approach is to have a clear view of the situation and see the way human beings see and read meaning into every situation they come across. "The interpretive approach encourages the use of different sources and methods of analysis to validate the information it has, make people to understand that knowledge is organised by the description of people's intentions, beliefs, values and self-understanding" (Henning, Van Rensburg & Smit, 2004:20).

A critical approach states that social reality is historically created and reproduced by human beings (Babbie, 2010). In a critical approach, the ability to change is determined by social, economic, political, and cultural dominations of human beings; it does not have any issues with the social reality, but the ability to reveal the relations of supremacies that exist in the real world (Babbie & Mouton, 2001:24).

Post-positivism states that reality is multiple, subjective, and mentally constructed by human beings, in order words, knowledge is created through experience and observation (Naris, 2009:47). Naris further state that post-positivism makes us understand that reality is not fixed, but could be influenced by either gender, culture, or understanding. It talks about "truth and valid evidence that is reliable for the existence of the social phenomena" (Babbie & Mouton, 2001:24).

The above mentioned paradigms are based on how people create their own understanding of what happens in real life, moreover, there is no right or wrong. Either of these paradigms could be applicable to any of the philosophical approaches. The researcher is required to gain a better understanding of the research problem, and therefore the ontological philosophy the study adopts is the subjective approach. This, according to Saunders, Lewis and Thornhill (2009), introduces an interpretive approach as the epistemological philosophy because people have different views, beliefs, and understanding of the usefulness of HRISs in different organisations, which could affect their interpretation of the system. This research focuses on finding the reasons why companies are not benefiting from the effective use of HRISs. HRIS usage is a practical and existing approach, meaning that the research was conducted based on the social phenomena of an existing problem.

Once the research approach has been clarified, the research design was created, which is a description of how to conduct the research (Babbie, 2010; Yin, 2003). Based on the nature of this research, the design followed a logical process from the research problem to questions and data collection to the conclusion.

3.3   RESEARCH APPROACH

Babbie (2010) indicates that in research, there are two types of approaches to implement, namely inductive and deductive.

An inductive approach was followed due to the interpretive paradigm chosen, where a case study was used to gain knowledge on how humans beings create meaning of a particular phenomenon under study (Du Plooy-Cilliera, Davis & Benzuiedenhout, 2014). The inductive approach views the real life context of HRIS implementation for a certain aspect of the economy (Descombe, 2010). This research was aimed at proposing a guideline for the retail sector to use in order to benefit from HRIS usage. No attempt was made to generalise the findings outside of the scope of this study.

3.4   RESEARCH STRATEGY

In order to examine the effective use of HRISs in the retail sector, there is a need for proper interaction and correlation between the researcher and the participants so as to have a better understanding of what the HRIS is all about and how the system works. For this purpose the researcher selected a qualitative research method, using a multiple case study as the research strategy.

3.4.1   Case study

According to Yin (2003:12), a case study is defined as *"*an empirical inquiry that investigates a contemporary phenomenon within a real life context, especially when boundaries between phenomenon and context are not clearly evident*"*. Yin (2003) explains that a case study is mostly utilised when the researcher tries to clarify confusing questions as to 'what, where and why' in HRIS implementation and its benefits to organisations.

Gerring (2004:342) defines a case study "to be regarded as an intensive study of a single unit for the purpose of understanding a larger class of (similar) units. A unit is also regarded as a partly bounded occurrence*"*. Gerring further states that a case study is research that studies the properties of a multiple case and its methods are characterised by tracing a particular process.

A case study is an empirical inquiry of primary data collected by the researcher (Babbie & Mouton, 2001:76). This could assist the researcher in collecting accurate data from the participants and also to be able to interact with them. A multiple case study is a research strategy that is conducted in a real life context with the involvement of people in various organisations. It offers the opportunity for relevant questions which will lead to relevant results and the comparison of the results to get to the solution (Yin, 2003). A multiple research strategy was followed. Two organisations were purposively selected because of their willingness to participate in the study and the convenience of their HR and IT operations being situated in Cape

Town. An oil and petroleum retail company as well as a supermarket and clothing retail company were selected for the study.

3.4.1.1 *Unit of analysis*

According to Welman, Kruger and Mitchell (2006:52), the unit of analysis is referred to as the population which in social research is defined as *"the study of objects which consists of individuals, groups and organisations".* The object of this study was identified as the HRISs used in the two case companies.

3.4.1.2 *Unit of observation*

Unit of observation refers to the sample size of the selected participants in research, also known as the subset of the population (Welman, Kruger & Mitchell, 2006:180). In a study of this nature, the sample is selected to represent the companies providing relevant information relating to the research (Welman, Kruger & Mitchell, 2006).

The units of observation in this research are the purposively chosen participants in the HR and IT departments who are interacting with the HRISs on a regular basis. Semi-structured questionaires and interviews were conducted on the following number of participants:

- Ten (10) participants in the oil and petroleum retail company
- Eleven (11) participants in the supermarket and clothing retail company

Based on this information, a total of 21 employees participated in this research and their positions will be itemised in Chapter Four (sections 4.2.1 and 4.2.2; Table 4.1).

3.4.2 Sampling

The research is based on non-random, purposively selected companies. The main criteria for selecting a company were the company's willingness to participate in the research, and the company had to be using some form of HRIS.

For the unit of observation, the companies were approached to identify the role players, i.e. employees such as management, administrators and IT staff. Snowballing was also used to get more views and information from different role players.

3.5 DATA COLLECTION

Data collection refers to the method of collecting the information relating to the research from the users, also called the participants; without their input the research will not be complete and useful. De Vos, Strydom, Fouche and Delport (2006:166) identify the types of data collection in research as questionnaires, secondary data, interviews, observations, experiments, and sampling.

Terre Blanche, Durrheim and Painter (2009) state that the objective of collecting data is to capture quality and sensible data which will be translated into useful and credible answers to questions that need to be answered. In this research a semi-structured questioniare was distributed and interviews conducted using an interview guide (Appendix A), which focused on the implementation and maintanance of HRISs in the retail companies in the Western Cape.

3.5.1 Semi-structured questionnaires

A semi-structured questionnaire is used to define the lines of inquiry which ensure that qualitative data are collected. According to Babbie and Mouton (2001), Babbie (2004) as well as Welman, Kruger and Mitchell (2006), the major advantages of semi-structured questionnaires are as follows:

- Enables the interviewee to maintain consistency throughout the interview process
- Participants prefer the interviewee rather than fellow staff members for accurate information to be given
- Flexible and questions that may be misunderstood could be clearly explained
- The presence of interviewee reduces the number of 'no answers'
- Adopts an interpretive approach which makes it easier to interpret results

A semi-structured questionnaire was used to collect data from participants who are directly or indirectly interacting with the HRIS to identify the problems experienced with using the system. According to Hoepfl (1997), the use of a semi-structured questionnaire gives much more data to work with and gears towards the use of either a qualitative or a quantitative approach to analysing the data. Sapsford and Jupp (2006:99) describe semi-structured questionnaires as "a set of steps that research could undergo in order to achieve its objective, such steps include the diagnosis, planning, performing, evaluating and specifying learning". Coleman, Guo and Dabbs (2007) state that a semi-structured questionnaire is an interactive process by which a decision is taken to produce results in the solving of the

research problem and also contributing to the body of scientific knowledge; this research was able to fulfil such a decision.

Terre Blanche, Durrheim and Painter (2009) as well as McMahon, Schutte and Barkhuizen (2014:216) mention that a semi-structured questionnaire is regarded as qualitative in nature where data are collected and undertaken towards calculating a statistical solution in order to arrive at a certain conclusion. The authors further identify important points to consider when applying a semi-structured questionnaire as follows: i) identify and select the sample members, ii) contact sampled individuals and collect data, iii) evaluate and test questions, iv) select the mode for posing questions and collecting responses, and v) check data files for accuracy and consistency.

3.5.2 Interviews

Interviews were conducted on a face-to-face basis with the selected participants from the two (2) selected retail outlets (mentioned in section 3.4.1.2). Approximately 20 minutes were mapped out for each interview conducted, though the exact duration depended on the level of the person that was interviewed. In the case of directors and senior managers, more time was allowed to gain a better understanding of their thought processes on the topic.

3.6 DATA ANALYSIS

Data analysis is the process of analysing the data collected and transforming it into useful information for the purpose of conducting valid research (Greener, 2011). As this research study is qualitative in nature, the data was transcribed, summarised, categorised, and thematic analysis applied. Data was validated by presenting the transcribed documents to the respective participants to verify the correctness of the transcriptions.

Coding was done by examining the transcriptions for keywords and concepts. The code was then categorised. The data was presented in relation to the interview questions and sub-research questions and specific findings were drawn. The findings were then used to develop themes. Thematic analysis is used to identify, examine, and record the data collected in coded format (Aronson, 1994; Ritchie, Lewis, Nicholls & Ormston, 2014). It identifies, examines, and records the patterns in data. Lewis (2011) states that themes are in the form of patterns across the data, which is important for a phenomenon that is associated to a specific research question. In this research, the themes were categorised according to the research

questions and sub-research questions as the basis for the discussion of the results in Chapter Five.

Lewis (2011:47) mentions that thematic analyses are performed in six phases of process coding in order to have meaningful patterns. The phases are as follows: i) familiarisation with the data: ii) generating initial codes, iii) searching for themes among the codes, iii) reviewing the themes, iv) defining and naming the themes, and v) producing the final report.

3.7   ETHICAL CONSIDERATIONS

Babbie (2010:64) defines ethics as "a general agreement that is shared by researchers about what is proper and what is improper in the conduct of a scientific inquiry". Ethics is a form of agreement between the researcher and the participants regarding the good and proper conduct of research, so that the participants could have the interest and confidence to participate in the research.

Greener (2011:64) as well as Leedy and Ormrod (2010:101) identify some of the ethical issues that a researcher needs to be aware of and also to inform the participants before they participate in the study:

- *Voluntary participation*: The participants will voluntarily participate and have every right to withdraw at any time from the research.
- *No harm to the participants*: This research does not require any form of experiments, in other words it will not cause any harm to the participants.
- *Anonymity*: This research will treat all the respondents as anonymous.
- *Confidentiality:* This research will not identify any participants in any way.
- *Deception:* This research will be conducted with honesty and truth; the participants must be informed what the research is meant for and what it expects to achieve.
- *Beneficence*: The participating companies will benefit from this research by using the outcome as a guide towards an effective implementation of an HRIS.
- *Justice:* There will be equal distribution of risk and benefits among the participants, thus, no discrimination.
- *Informed consent:* The participants will be informed of what the research is all about and they will decide if they want to participate.
- *Right to privacy*: The participants will be given their right to privacy in this research.

The researcher made sure that the mentioned issues were strictly complied with and informed consent was obtained from the authorities as well as individual participants of the selected retail outlets.

Ethical issues relating to sensitive information from organisations such as the retail outlets are usually seen as a threat to the privacy of the companies. This research kept all the information collected from the companies and its participants as strictly confidential. The names of the companies and that of the participants were not mentioned, and the semi-structured questionnaires and other documents were encoded for confidentiality. This research did not disrupt the normal working conditions of the companies and participants involved.

3.8   SUMMARY

Chapter Three explained the research methodology and design portrayed by the processes that were followed to conduct a conclusive research study. The research was conducted using a qualitative research method in order to have an interpretive perspective of the social phenomenon. The philosophical approaches used assisted the researcher in determining the impact of HRISs in a real life situation through ontology, epistemology and methodology. The ontological approach has been identified as subjectivist and the epistemological stance as interpretive.

An inductive approach was followed due to the selected interpretive paradigm to guide the researcher in proposing a guideline for effective HRIS implementation in the retail sector. A multiple case study was used as the research strategy, involving two retail organisations. The unit of analysis was the HRISs used in the two companies, with 21 participants from these companies being the unit of observation. The participants were non-randomly and purposively selected.

The data was collected through a semi-structured questionnaire that was prepared to align with the research questions, and interviews were conducted individually with the participants. The interviews were transcribed, summarised, categorised, and thematically analysed; the transcribed data was validated by the participants before being used. Ethical considerations were all discussed at length in this chapter. Documents relating to both retail outlets were retrieved from their websites to support the research.

The details of the interviews and the number of purposively chosen participants are explained in detail in the next chapter where the data collected are analysed to identify the findings and themes for discussion.

CHAPTER FOUR: FINDINGS

4.1   INTRODUCTION

This chapter presents an analysis of the qualitative data collected for the study. The field work focused on two companies—an oil and petroleum retail company as well as a supermarket and clothing retail company.

The chapter is structured as follows: i) description of the case studies, ii) data analysis, iii) findings, iv) summary of the findings and themes, and iv) summary of the chapter.

4.2   THE CASE STUDIES

This research was based on a multiple case study strategy. The research focused on the impact that HRISs have on the two retail outlets in an attempt to identify differences and similarities between the two cases in order to gain an understanding of how the systems impact retail businesses in general. This research was based on the problem statement that *HRISs are difficult to implement and maintain and as a result, organisations cannot effectively utilise these systems to their benefit*. The researcher was able to determine whether the implementation and maintenance of HRISs is difficult in both retail outlets, and also identified the reasons for this difficulty in order to remedy the situation in the retail sector.

4.2.1   Oil and petroleum retail company

This is a well-known oil and petroleum retail company that has branches in South Africa, Botswana, Namibia, Zimbabwe, Mozambique, Kenya, Ghana, Gabon, Tanzania, Rwanda, Burundi, Zambia, Malawi, Lesotho, Swaziland, Mauritius, Reunion and Congo-Kinshasa. The company has about 1,500 service stations with built-in convenient stores with approximately 4000 employees. The employees are categorised into permanent, fixed term, and third party contract employees. Ten (10) non-random, purposively selected participants were selected from the HR and IT departments. The number of participants and their positions are itemised in Table 4.1.

4.2.2   Supermarket and clothing retail company

This is a well-known retail company. The company is the second largest supermarket chain store in South Africa. It has branches in other southern African countries such as Botswana, Mozambique, Zambia, Zimbabwe, Lesotho, Namibia and Mauritius. The company has 50,000 employees of which about 9,500 of are

working in the 45 retail stores in the Western Cape. The employees are categorised into fixed term, contractors, consultants, permanent and ex-retirees. Interviews were conducted with eleven (11) non-random, purposively selected participants in the HR and IT departments. The number of participants, their positions, and codes that are used to identify them, are itemised in Table 4.1 below.

Table 4:1: Brief description of participants in the selected retail outlets

Company	Participants and their positions	Number	Code
Oil and petroleum retail company	HR manager	1	E2
	Payroll/Admin manager	1	E9
	Assistant payroll/admin manager	1	E4
	IT manager	1	E6
	HR manager (Intelligence & Reporting)	1	E7
	HR systems analysts	2	E1 & E5
	HR consultant	1	E3
	Senior HR coordinator	1	E8
	Senior payroll coordinator	1	E10
Supermarket and clothing retail company	HOD HR	1	P1
	Senior HR manager	1	P2
	HR manager in corporate division	1	P4
	HR manager in training division	1	P5
	HR manager in clothing division	1	P11
	HR manager in IT division	1	P7
	HR officer	1	P8
	HR administrators	3	P6, P9 & P10
	HR secretary	1	P3
	Total participants	**21**	

4.3   DATA ANALYSIS

4.3.1   Introduction to the data analysis

The analysis centred on how HRISs were implemented, being maintained, and effectively used by the retail companies as described in sections 4.2.1 and 4.2.2. Interviews were conducted as described in Chapter Three (section 3.5.2), transcribed and presented in this chapter.

In this chapter, the information from the transcriptions are explained separately per company, then the findings of both companies are combined in the summary findings according to the research questions and sub-research questions (Table 4.3

to 4.6) to enable the researcher to identify the problems, and finally the summary findings are themed according to the head findings in (Table 4.7).

This study has a problem statement with two research questions (sections 1.3.1 and 1.3.2). Each research question has two sub-research questions; the interview questions have been aligned with the research questions. For the comfort of the reader the problem statement and research questions are once again stated.

4.3.2 Problem statement

HRISs are difficult to implement and maintain and as a result, organisations cannot effectively utilise these systems for their benefit.

4.3.3 Research questions and sub-research questions

The research question and sub-research questions are as follows:

RQ1: What are the reasons for organisations not implementing Human Resource Information Systems (HRISs) effectively?
SRQ1.1: What factors affect effective HRIS implementation the retail sector?
SRQ1.2: What strategies have organisations achieved in HRIS implementation?

RQ2: How do organisations utilise HRISs in order to achieve the benefit thereof in the retail sector?
SRQ2.1: What are the HRIS modules the retail sector uses to have an effective system in place?
SRQ2.2: How do organisations use HRISs in their decision making processes?

These questions form the basis of the interview questions that were answered by the 21 participants in the HR and IT departments of both retail outlets in the Western Cape. It is important to state that no attempt is made to generalise the findings of this research.

4.4 RESULTS FROM THE INTERVIEWS

The results are presented as follows: firstly the applicable research question is given, followed by the sub-research question. The sub-research question is then followed by the specific interview questions in an attempt to elicit answers from the participants. Every interview question is then analysed and findings are derived from the analysis. Where applicable, statements are supported by quotes from the interviewees.

RQ1: What are the reasons for organisations not implementing Human Resource Information Systems (HRISs) effectively?

The rationale for this question was to identify the factors and/or reasons why organisations that use an HRIS, are not gaining the expected benefits from the HRIS.

SRQ1.1: What factors affect effective HRIS implementation in the retail sector?

In assessing the factors affecting effective HRIS implementation, the researcher posed questions aimed at identifying some of the factors and determining the impact these factors have on the system and organisation.

IQ1.1.1: Does your organisation make use of an HRIS? If yes, what is the name of the HRIS?

The rationale for asking this question was to determine if the participating organisations have an HRIS and what kind of system they use.

In the oil and petroleum company, all the participants—E1 to E10—confirmed that they have an HRIS in place—*SAP HR*—which has been implemented in 2001 as a replacement for *PeopleSoft*. However, despite using *SAP HR*, they are also using other systems such as *Neptune* and *Nakisa* for recruitment and talent management because those modules are not operating on *SAP HR*. According to respondent E7, "we also use other systems such as Neptune and Nakisa to support *SAP HR*".

In the supermarket and clothing company all the participants—P1 to P11—also indicated that they do have an HRIS known as *SAP HR* which was implemented as a replacement to the *VIP* system in 2006, however, despite using *SAP HR*, they are also using *Kronos* as a supporting system for time management, scheduling, and absence management modules because those modules are not in operational for *SAP HR*.

According to P1,

> "…we use the SAP system which was introduced in 2006; there is [sic] payroll function which is [sic] impacted on HR and employees, that would be Kronos which is [a] time and attendance system. We've got one store that is still on VIP which there is a specific reason for it".

Both retail companies moved from their legacy systems to *SAP HR*. However, both companies do have other systems that are used to support *SAP HR*. Also, in one of the company's they still use the old system in one of the stores for an undisclosed specific reason.

IQ1.1.2: Is there a standardised HRIS specifically for the retail industry?

The rationale for this information was to determine if there is a standard HRIS specifically for the retail sector. In the oil and petroleum company,

All of the participants indicated that they do not know of an HRIS specifically designed for the retail industry. They mentioned that most companies use SAP HR but it has to be customised to suit the individual business's needs. E1 stated the following: "No, but I think most companies use SAP and it is customised to suit their business". They are of the opinion that *SAP HR* is regarded as a system of choice by most organisations. According to E6, "SAP is a system of choice by most companies in South Africa". Respondent E8 supports the view of E6 by saying that "SAP is a universal system that can suit any organisation, they just modify it to suit their needs".

In the supermarket and clothing company, participants P1, P2, P3, P4 and P9 indicated that they are not aware of any standardised HRIS specifically for the retail sector. According to P4, "I do not know of any system that is standardised for the retail industries". Participants P5, P6, P7, P10 and P11 indicated that there is no standard HRIS for the retail sector, but most retail organisations use SAP, customised to suit their business needs. P11 said that "all I know is that most retail industries use SAP with its modules, but I do not know of a specific HRIS for the retail industries in general". SAP as system of choice is being validated by P8 saying that "when I browse through job adverts and things like that, SAP has become the preferred requirement system to have knowledge on".
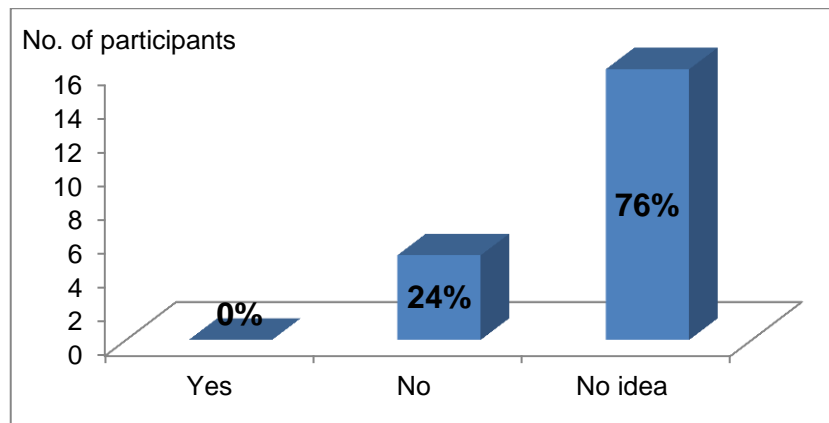
Figure 4.1: Participant perception on the existence of a standardised HRIS for the retail sector

Based on the findings from both companies, it was found that in Figure 4.1, (16) of the 21 participants (76%) indicated they do not know of a standardised HRIS meant for the retail outlets, and five (5) of the 21 participants (24%) indicated that there exists no standard HRIS for the retail sector. Most of the participants indicated that most organisations use *SAP HR*, customised to suit their business.

IQ1.1.3: *The HRIS should capture all employees' details. Is it correct?*

This question was asked in order to determine if the details of all the employees are captured on the HRIS. In the oil and petroleum company, participants E2, E3, E6, E8 and E9 gave a positive indication that all the employees' vital information (relevant to maintaining an employee records database) are captured on the SAP system. According to E2, "the vital information of all employee[s], irrespective of the terms of employment, is captured in the SAP system".

E8 said that the following:

> "…We have recruiting, engaging, payroll and salaries (benefits), all separate. They are not together like most companies. We capture the information of all the employees on payroll except the outsourced contractors that are paid by contractors. But we do have their names, ID numbers, company they work for in our system".

Participants E1, E4, E5, E7 and E10 indicated that not all employees' information is captured in SAP, but for legislative purposes they are working towards achieving this in the future. E4 stated "that is the intent of the company to capture the information of all the employees in the SAP system, but not all the people employed

through the labour brokers and third parties are captured. But due to the new legislation, we are currently working on it".

In the supermarket and clothing company's case, all the participants—P1 to P11—gave a positive indication that they do capture the vital information of all employees on SAP for legislative purposes. P1 stated the following:

> "Yes, it is and we also ask what is relevant to the business, so if it is not relevant to what is required to manage an employee, what I mean by that is am not going to ask an employee about their hobbies, but everything else we ask at the time of employment and we update data as we go along".

P11 said that "it depends on what you mean by all, but all the relevant information is captured in SAP. But I cannot say about the correctness and completeness of the information captured, I only know of what I and my team do". P11 further emphasised that "the level of understanding what is important to capture is different across the different departments for a big retail industry as this. I think there must be more consistency with that and it must be reinforced".
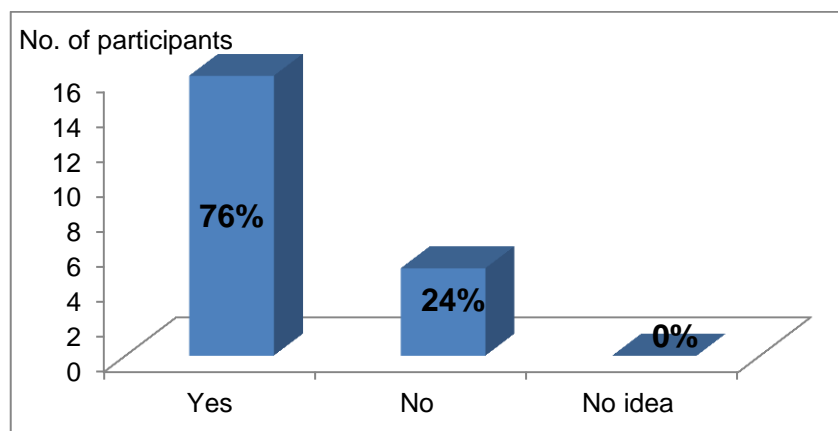
Figure 4.2: Employee knowledge of capturing employee details on HRIS

Based on Figure 4.2, sixteen (16) of the 21 participants (76%) agreed that they do capture all employees' vital information on SAP. Five (5) of the 21 participants (24%) from the oil and petroleum company) indicated that they do not capture all employees' details in SAP.

IQ1.1.4: Do all the employees have access to the HRIS?

The rationale for this question was to determine whether all the employees of both companies have access to their respective HRISs and how their access could impact on the effective implementation of these HRISs.

In the oil and petroleum company, eight (8) of the participants—E1, E2, E5, E6, E7, E8, E9 and E10—stated that not all of the employees have access to *SAP HR*. According to E2,

> "…not all of them have; only permanent employees have access to the system. Contractors that are directly employed by the company also have access to the employee self-service (ESS) module. But the ones from labour brokers will not have access, but there vital information will be on the SAP system".

E6 said "no, but the majority of the employees that has [sic] access to a dedicated personal computer or laptop do have access to SAP; on [sic] our depots we have kiosk solutions were they can have access". E3 and E4 gave a positive response that all the employees have at least some access to SAP. According to respondent E4, "people that need to capture the personnel details in the system, have the access to do that. However for a normal employee, access is only on the ESS". Employee self-service (ESS) is a module in the *SAP HR* system that allows all employees to capture information such as leave and overtime on the system themselves.

In the supermarket and clothing company all the participants—P1 to P11—stated that not all employees have access to *SAP HR*. According to P4,

> "…not all employees have access to SAP. HR people have access, management have certain access to sign documents and view certain details but not really a lot, even leave is managed in a separate system from SAP. I would not say that SAP is used 100%, because there are things that are being done outside SAP. There are packages we do not use which we are supposed to be using".
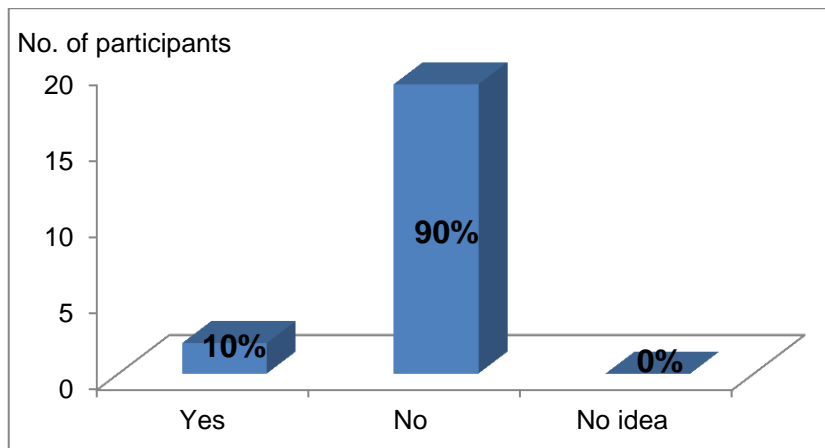
Figure 4.3: Employee access to HRIS

Figure 4.3 show that 10% of the participants (2) of the 21 indicated that all the employees have access to the SAP system. Nineteen (19) of the 21 (90%) participants indicated that not all employees have access to SAP. In the oil and petroleum company, they do have the ESS and Management Self Service (MSS) modules on SAP, but not all the employees' details are captured on the system. The MSS module is used by the managers to view and sign the information captured through the ESS module by their subordinates for control purposes. The ESS module works together with the MSS module in order to be efficient.

IQ1.1.5: Does your organisation conduct any form of training to equip the users on how to make good use of the HRIS?

The rationale for this question was to find out if the organisations conduct training to equip their employees on how to make good use of the system.

In the oil and petroleum company, all ten participants—E1 to E10—gave a positive response that they do conduct training. The company also does assessments to establish if employees are capable of using the SAP system. Once an employee is deemed to be competent, a competency agreement is signed before access to SAP is granted. According to E6, "training is actually a prerequisite for access and if anyone does not pass the assessment, then it might require a one-on-one training to make sure that they can be able to use the system".

E5 said that:

> "...they have road shows to particularly train those at the depots and petrol stations on how to use the ESS module, any mal-functionalities or

something that might have been changed, we've got people that use the system more regularly, there will be [an] individual training section for them and is conducted in-house".

In the supermarket and clothing company all the participants—P1 to P11—gave a positive response that they do conduct training and assessment, and that a competency agreement is signed before anyone is allowed access to SAP. According to P1, "it is not really applicable for all the employees, but the SAP users are fully trained and you sign a competency agreement before you can be allowed to use the system".

P8 mentions that:

"…there is training that is provided. First they take you through navigation which is how to operate the system, then training on specialisation on the modules you need for your work. If you are employed as a coordinator, you will undergo modular training and events. If you are a generalist, you need all-round training on all the modules that are provided".

IQ1.1.6: Is there effective information security in place to safeguard the HRIS?

The rationale for this question was to determine if the companies have information security to guard the HRIS and how effective the protection of the system is.

In the oil and petroleum company, all the participants—E1 to E10—gave a positive indication that they do have effective information security in place, which lies with the IT department. According to E6, "we have a dedicated security team who looks after staff authorisation on both our corporate financial systems and the HR systems". E4 commented that "business recovery and procedures are well in place at the moment and the division that plays the key role is the IT department. If there would be a disaster, all our key people will be taken to a separate location to continue our work".

In the supermarket and clothing company, participants P1, P2, P4, P5, P6, P7, P8, P9, P10 and P11 gave a positive indication that they do have effective information security in place to guard the SAP system, which lies with the IT department. According to P1, the "SAP system is an internationally recognised system and I do not think we would have embarked on the system if it is not secured". P7 said that "we do backups on a regular basis and also have software [sic] that guide against such". P2 stated that "I cannot tell you what kind, but we are highly security

conscious on our system in that it does not allow people to get in so easily. In SAP there is a password". One respondent had no idea if the system is secured.

Ninety-five percent (95%) of the participants (20) of the 21 indicated that they do have information security in place, which is the responsibility of the security in the IT department. They also indicated that part of the security in place is that access to SAP requires a username and password. There are authorisation and security teams in place to support the system. The oil and petroleum company has a business recovery procedure in place in case of a natural disaster. For example, SAP could be uploaded within 72 hours.

IQ1.1.7: Identify the critical factors that your organisation went through in the implementation of the HRIS?

The participants went ahead to establish which of the indicated factors are critical in the implementation of an HRIS in both retail organisations and their effect on the business. The critical factors listed and investigated are team work, top management support, business plan and vision, software development, project management, change management, and other identified factors by the participants.

i) Team work
In the oil and petroleum company, all the participants gave an indication that they have an effective team where the users are made part of the project team in the implementation process. According to E7, "people were made part of the project team in the implementation process where their inputs were taken into consideration to support the process".

In the supermarket and clothing company, P1, P2, P4, P5, P6, P7, P8, P9 and P11 gave a positive indication that they do have team work in the implementation process where all the users are part of the process. According to P1, "making people that will be responsible in the system to be part of the implementation process, by asking for their inputs". P3 and P10 did not have an idea of what critical factors were involved in the implementation of the HRIS.

In both companies, 90% of the participants (19 of the 21) indicated that they do have team work in the implementation process and their inputs were taken into consideration.

ii) Top management support

In the oil and petroleum company, all the participants stated that they do have top management support in the implementation process through the sustainability of skills and knowledge by training the existing employees.

E6 indicated that:

> "…as part of the top management support, our approach is more of sustainability when you have people with a lot of skills and knowledge, we rather invest in their training and development to transition them or else you will lose a whole lot on intellectual capital in that process".

The participants from the supermarket and clothing company—P1, P2, P4, P5, P7, P8, P9, P10 and P11—indicated that they do have top management support in the implementation process but still do things that compromise the integrity of the system. P4 indicated that "at times they might decide to sign manually instead of electronically, and this compromises the integrity of the system because anyone can forge anyone's signature".

In both companies, (19) of the 21 participants (90%) stated that they do have top management support in the implementation of the system. The oil and petroleum company had to adopt the sustainability of skills and knowledge internally by investing more on training. In the supermarket and clothing company, they problems of manual intervention compromise the integrity of the system.

iii) Business plan and vision

All the participants in the oil and petroleum company indicated that the company does have a business plan and vision in the implementation process and invests large amounts of capital on training the people and get them certified on SAP solutions. According to E6, "internal training and development for the people who is supporting the system, we made a big investment to train people and get them certified on SAP solutions".

P1, P2, P5, P7, P10 and P11 of the supermarket and clothing company agreed that they do have a business plan and vision in the implementation process. According to P2, "the standardisation between units was part of the business plan". P8 said that "the awareness of restructuring the company on the new system was part of the business plan". P4 however disagreed by saying that "I do not see SAP used or contribute to the business plan and vision of the company. Yes, it was introduced and helps administratively, but in terms of business plan, I don't see its relevance".

P3, P6, P8 and P9 did not know of a business plan and vision that should be considered when implementing the HRIS.

In both companies, 76% of the participants (16) of the 21 agreed that they have a business plan and vision in the implementation process. In the oil and petroleum company, the training of the users for SAP certification was part of their business plan. In the supermarket and clothing company, the standardisation of the units and restructuring towards a new technology were part of the process.

iv) Software development

In the oil and petroleum company, participants E1, E2, E3, E5, E6, E7, E8, E9 and E10 argued that software development is a critical factor in the transformation of their internal resources into a new technology platform in the implementation process. E6 said the following: "From seeing that I work in IT, it is the transforming of our internal resources to a complete new technology platform". E4 however indicated that software development was not part of the critical factors because every new system comes with new software. E4 stated that "software development is not critical because when you buy a system, it will automatically come with software developed already".

In the supermarket and clothing company, participants P1, P2, P4, P5, P7, P8, P10 and P11 agreed that they were able to achieve software development in the implementation process through the introduction of a convenient and fitting working environment. According to respondent P7, "the software development brought the introduction of 'version system' for a working environment that is fit and proper". Participants P3, P6 and P9 could not answer to the question.

Both companies see software development ability as a critical factor in the implementation process.

v) Project management

In the oil and petroleum company, formal project management is seen as a critical factor by E1, E2, E3, E4, E5, E7, E8, E9 and E10. A specific project team is appointed for the implementation process. As previously mentioned by E7 (in IQ1.1.7), the SAP users were made part of the project team.

The supermarket and clothing company participants—P1, P2, P4, P5, P7, P8, P10 and P11—stated that they do have project management procedures in place in the

implementation process through the introduction of a project management team to see to the project implementation. P1 (in IQ1.1.7) commented that SAP users were made part of the project team, where their inputs were considered in the implementation process.

Both companies regard project management and project teams as critical for HRIS implementation.

vi) Change management

Change management is a critical process in the implementation of SAP. Respondent E7 said that "change management is the most critical, due to the complete transformation of the human resources in the process".

As in the case of the supermarket and clothing company, eight (8) of the eleven (11) participants gave a positive indication that they applied change management in the implementation process. P4 said the following: "When SAP was implemented, there was a big project called 'Vuselela'. It was intended to introduce such change". P3 disagreed because of the mindset of the older people who find it difficult to adapt to changes in technology. P3 said that "the problem we experienced is basically people having to adapt to change, they are not used to the new technology. Most of the people that work for the company are the older people that have been with the company for 20 years and over".

In both companies, the majority of the participants indicated that they have used a change management process during and after implementing the HRIS. In the supermarket and clothing company, the introduction of a project team called 'Vuselela' managed the change.

vii) Other factors

Participant E5 of the oil and petroleum company mentioned that the turnover of key staff does have a negative effect on the effectiveness of the HRIS. The negative effect is because of the non-documentation of intricate processes. E5 said that "anyone in payroll who might be aware of intricate processes that might not be documented, should that person abscond or leave, there might not be anyone to follow through on that process in time".

P4 of the supermarket and clothing company mentioned high cost and poor functionality as part of the negative effect of the HRIS implementation. According to P4,

> "…SAP is not fully utilised because of the cost issue, leave are not applied on SAP unlike other organisations that do make leave applications on SAP. Another issue is that the packages/programs/pages could have been built in differently, because there so many of them to an extent that they require a full administrator to do that like when you transfer people".

In both companies, it was realised that the non-documentation of intricate processes, high cost, poor functionality, and underutilisation of the system result in a negative environment during the system implementation.

IQ1.1.8: Does the size of your organisation and its operation determine the effectiveness of the HRIS?

This question was asked in order to establish if the size of an organisation contributes to the effective implementation of an HRIS in a retail organisation.

In the oil and petroleum company, participants E1, E2, E4, E5, E6, E9 and E10 gave a positive indication that the size of the organisation does determine the effectiveness of the HRIS because of the cost involved, the number of users, and the technology base that is deployed to operate the system. E4 said the following: "If I take this oil company size in terms of the population and what we expect from its size, sometimes someone gets annoyed due to its level of inflexibility. But in my situation, we are happy with the system due to its procedure driven". According to respondent E7, "the size of the organisation drives the need for the system usage, but does not determine the effective use of the system. I believe it must be rock solid irrespective of size".

Participants P2, P4, P6, P7 and P11 in the supermarket and clothing company stated that the size of the organisation does matter in the effectiveness of the HRIS because of the cost and coordination of the system. P7 said that "yes, I think so because with the big organisations like this, they can afford the expected resources to acquire more required modules and upgrades to suit their business". P4 said the following: "I think so, because of our size it becomes difficult to coordinate things, to get people in one room to talk about SAP, you would have these challenges but would not know where to bounce these challenges and also who would affect the change".

Participants P1, P3, P5, P8 and P9 in the supermarket and clothing company did not agree that size of the organisation matters in the effective use of the HRIS. The effectiveness is determined by the training of users and accuracy of data.

According to respondent P5,

> "…I think it is more complicated because you have to continue to train and retrain to manage 9,000 to 10,000 people at a time, with the right system in place for company as this I think the size of the organisation shouldn't make a difference if you got the right people trained up".

Respondent P1 supported P5 by stating that "I don't think it has any impact, I think that SAP is an effective system and if you have users that are not trained, and you will not have a good input".
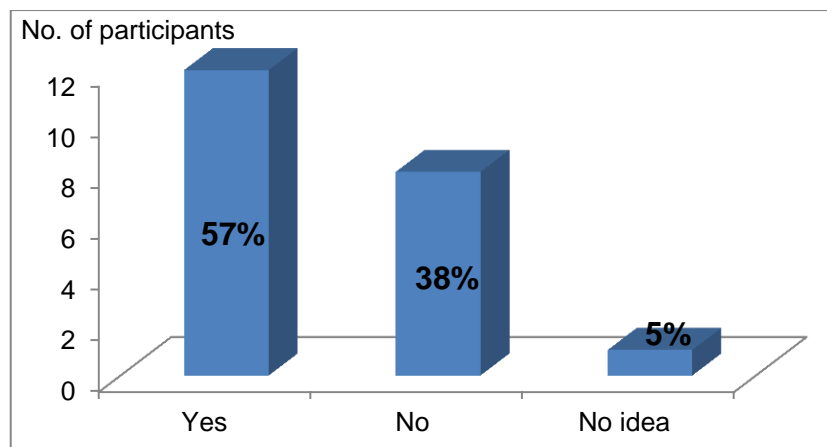
Figure 4.4: Participant opinion of on whether organisation size has an effect on HRIS

In Figure 4.4, based on the findings from both companies, 57% of the participants (12) of the 21 indicated that the size of the organisation does matter in the effective use of the HRIS in terms of cost, coordination, and the technology base of the system. Eight (8) of the 21 participants (38%) disagreed that the size of the organisation matters; what matters are the data accuracy, consistent use, and effective training.

IQ1.1.9: Is there effective team work and staff participation in your organisation to support the implementation process of the HRIS?

The question was posed to establish if there is team work and staff participation among the employees to support the implementation and use of HRISs in both organisations.

According to respondent E6 of the oil and petroleum company, "we have a very formal project management structure and a very formal project management procedure that we follow. From the start the business users are involved in drafting the business case and present it to the IT investment committee. So they take ownership upfront". E7 supported respondent E6 by saying that "we were on the project full time, we had to ensure that we work with consultants, becoming the implementation partner, which process led to knowledge transfer".

Nine (9) of the participants of the supermarket and clothing company—P1, P2, P3, P5, P6, P7, P9, P10 and P11—were of the opinion that they support implementation process through team work. P1 stated that:

> "…when you look at our structures on SAP which is called the organisational management, we have the person who is the expert that conducts the training, she has a different role but will be available to be contacted on how do we do this and that. We have several of those people, the team work and support is there".

In support of P1, P11 said that "there is team work because there are different departments that deal with different information on [the] SAP system, and there is support in different departments. On the technical point of view there is support, we have different sets of people dealing on different modules in the HR". P4 and P8 did not agree with the other participants that there is team work. They argued that some of the HR people are left alone to do their work without any assistance. P4 stated that "I would say no because everyone is doing their own thing, we manage our regions. You may not know that an HR person is sitting around you, we have no connection with each other" (a problem of business process management).
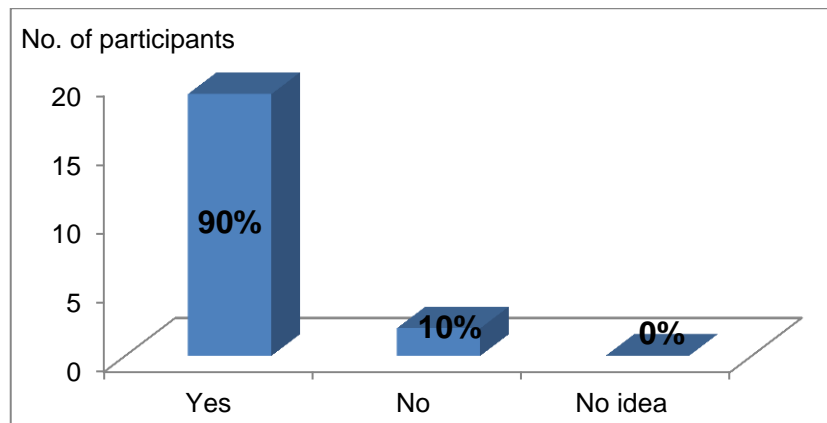
Figure 4.5: Participant response on team work and staff participation

In Figure 4.5, based on the findings from both companies, 90% of the participants (19 of the 21) agreed that there is team work. In the oil and petroleum company, it was specified that the users were involved in drafting the business case that led to knowledge transfer.

IQ1.1.10: Does the management have total confidence and trust in the HRIS in terms of usage and performance?

The question was posed find out if the management of both companies do have confidence in the HRIS and what the drivers are of such confidence and trust.

In the oil and petroleum company, E2, E3, E4, E6, E7, E9 and E10 rated the management confidence and trust in the SAP system high. According to E2, "Management believes in the system, we have invested a lot in the system and in order to invest, we need to constantly go back to management to demand for any upgrades on the system and they always accept. So they have confidence in the system". E1 and E8 rated the management confidence and trust in the system *medium* because of human error which is seen as one of the major problems that affects trust in HRISs. According to E8, "where I am we have confidence in the system, all we need to do is to push up the performance of the individuals to get the SAP people to train the users thoroughly. You need to know the system too well before you can speak about the system".

One participant (E5) in the oil and petroleum company rated the management confidence and trust *low* because SAP is date driven. Respondent E5 said that:

"I think some managers don't understand how the SAP system works and that it's date driven. So the information that they want in terms of certain

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reports might not be accurate at that particular time, they tend to think that they are not seeing what they expect to see, they tend to doubt the information or the system as a whole".

P1, P2, P5, P6, P7, P8 and P11 (supermarket and clothing company) rated the management trust *high* for the SAP system, but depending on the accuracy of the data. According to P5, "the system and the team managing it are extremely competent but that does not necessarily mean that the people you have trained apply their mind when they are using it, and that I believe is the biggest issue". P3, P9 and P10 rated the management confidence and trust *medium* because of the mindset of some of the older members of management who still doubt the system. P3 stated that "some of them had difficulty in adjusting to the change, so they come with the mentality of asking how you know if the system is right". Respondent P10 mentioned that "the irregularity of the dates when they moved from payroll to SAP system. It can be corrected, but will take some time".

P4 rated the management confidence and trust *low* due to the complexity and difficulty of operating the system. According to respondent P4,

"Management does not have total confidence and trust in terms of SAP usage because as much as most of them comply, they feel it's a lot of work and that is constrained on them. I would have loved it if you raise a form and later going back to raise the same form again; SAP will reject it because it is already exist. But unfortunately, it doesn't do it like that".
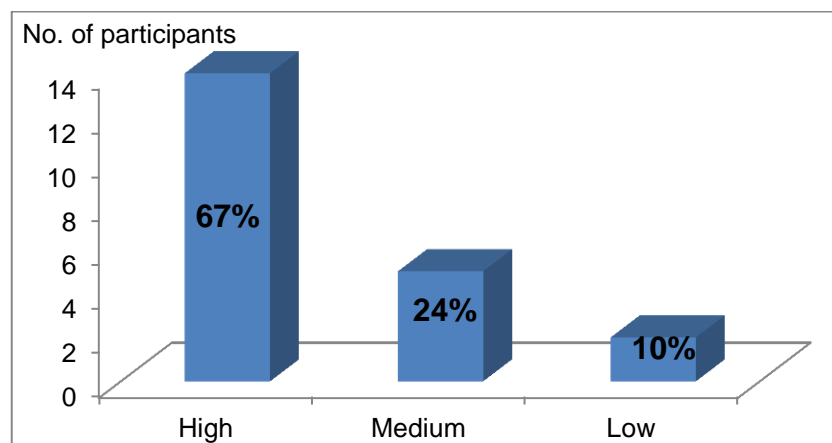
Figure 4.6: Opinion of participants on management confidence and trust in HRIS

In Figure 4.6, the findings from both companies indicate that (67%) of the participants (14) of the 21 rated the management confidence and trust *high* because of the high rate of investment made in the implementation of the HRIS, and also because it assists the organisation in speeding up the operations of the HR processes. Five (5) of the 21 participants (24%) rated the management trust *medium* because of human error and the difficulty in adjusting to change by some members of management. Only two (2) of the 21 participants (10%)—E5 and P4—rated management trust *low* because of the date driven and poor functionality of the system.

SRQ1.2: What strategies have organisations achieved in HRIS implementation?

The rationale for this question was to identify the strategies both companies are able to achieve in the implementation of the HRIS, and to determine if the performance of one organisation differs from the other. Furthermore, the question was asked to determine the differences in HRIS usage between the two organisations, if any.

IQ1.2.1: Does the implementation of the HRIS assist your organisation to accomplish the following strategies as listed below?

The strategies listed and investigated are: Recruitment, Training, Development, Reward, Employee Relation/Equity, Talent Management, and Performance Management.

i) Recruitment strategy

In the oil and petroleum company, six (6) participants—E2, E3, E6, E7, E8 and E9—agreed that they have achieved the recruitment strategy in the implementation process (Chapter Five, section 5.1.6) through the coordination of the HR processes into a systematic and automated form, although recruitment is not conducted on SAP. Respondent E6 commented as follows: "In recruitment we have invested in a third party solution which is a South African system for recruitment process called Neptune, and we are now trying to integrate that into our SAP solution". E8 said that "I do not think recruitment should be on SAP because we will have loads of people that are not employed in the company on the system and that information will not be relevant for the organisation".

Four (4) of the participants in the oil and petroleum company—E1, E4, E5 and E10—are neutral as they did not see the impact of the system on recruitment as

recruitment is done in a separate system known as Neptune. According to E4, "there is a recruitment module in SAP and it is not in use at the moment". E1 stated that "recruitment is neutral because we use Neptune for it".

All the participants of the supermarket and clothing company agreed that they are able to achieve the recruitment strategy in the implementation process, though recruitment is not conducted on SAP. According to respondent P1, "if your recruitment of SAP is correct, and your store provides you with the necessary information to update the system, then it greatly assists with the strategy". P4 indicated that "for recruitment, we need to make good use of the system for recruitment; people need to apply online and we need to use it much better, but at the moment it is done manually".

In both companies, 81% of the participants (17) of the 21 agreed that they do achieve the recruitment strategy through the coordination of the HR processes into a systematic and automated form. Four (4) of the 21 participants (19%) opted to stay neutral because recruitment is not conducted on SAP; they did not fully agree that the company achieved the recruitment strategy.

ii)   Training strategy

In the oil and petroleum company, nine (9) participants—E1 to E9—agreed that they have achieved the training strategy in HRIS implementation because all the information and activities relating to training are on *SAP HR*.

According to E2,
> "…I agree on training and development because all the employees' personal data and that of the service providers are on the system. When you book for training on the system, your superior will approve it on the system. At a specific time, we could be able to know who has been trained and so on through reports generated from the system".

E4 said that "training information is a requirement from the Department of Labour to know how many people have been trained and how many times they were trained at a particular period".

All participants in the supermarket and clothing environment agreed that they were able to achieve the training strategy in HRIS implementation because they do use *SAP HR* for training purpose and any information relating to training could be retrieved from the system. According to respondent P1, "training being a compulsory

requirement and equipping the staff to make sure that their jobs are effectively done, we will achieve customer satisfaction". Respondent P4 said that "we use it for work place skill plan development".

P6 also said that:

> "…for training and development, it is good because we capture all the information relating to all the training even if in 5 years' time the person has left the company, we could still key in his details and all the information relating to his training will be retrieved from the system".

In both companies, 20 of the 21 participants (90%) agreed that training strategy is achieved because they do conduct training on the HRIS and the training information could easily be retrieved form the system. Also, training is a prerequisite to gaining access to the HRIS.

iii) Development strategy

In the oil and petroleum company, nine (9) of the participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—agreed that the company is able to achieve the development strategy with system implementation through the enormous investment in staff development for organisational transformation to conform to employment equity. According to E6, "strategically we have seen a lot of investment in the organisational development space for organisation transformation in a form of employment equity. We have a high credit in the development and training of staff which is quite a key area".

All the participants in the supermarket and clothing company agreed that they are able to achieve the development strategy through the implementation of the HRIS because it helps to track down the number of skilled, trained, and qualified employees within the organisation at any given time. P4 commented that "on development, we use it to track the people on training and also book people on training".

In both companies, 95% of the participants (20 of the 21) agreed that they were able to achieve the development strategy in the implementation of the system through investment in staff development and also identify the skilled employees for transformation purposes.

iv) Reward strategy

In the oil and petroleum company, nine (9) of the participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—stated that the reward strategy has been achieved in the implementation of the HRIS. This is measured according to the successful roll out of the payroll system. According to respondent E7, "for reward, everyone gets paid according to what they deserve". E5 disagreed by saying that "on rewards, there is no special compensation for any performance that relates to HRIS and that the company need[s] to look into that for motivation purposes".

In the supermarket and clothing company, nine (9) of the participants—P1, P2, P4, P5, P7, P8, P9, P10 and P11—agreed that the reward strategy is achieved in the implementation process because the payroll is on SAP, which is one of the key measurements for rewards strategy. According to respondent P4, "for rewards, we have a salary system that runs on SAP; we use it to know what the increase in people's salary is". Respondent P10 also indicated that "we do have long service awards that falls under rewards".

In both companies, 85% of the participants (18 of the 21) agreed that having the payroll on the HRIS, is one of the key factors to measure reward strategy achieved through the implementation of the system. The system makes it easier to prepare the payroll and people get paid according to what they are qualified to earn.

v) Employee relation/equity strategy

In the both companies some of the participants were able to identify employee relation and equity as part of the strategies achieved.

Respondent E4 of the oil and petroleum company identified "employee relations (IR), also known as industrial relation, as a strategy that was achieved".
Employee relation involves the maintaining of employer-employee relationships which contributes to satisfactory productivity. System implementation is seen as a tool that keeps the relationship in a good conduct.

P2 of the supermarket and clothing company indicated "employment equity as a strategy achieved". Employment equity deals with the legislative compliance in the Employment Act and its interaction with the company; with the implementation of such a system the company is able to align the HR processes with the Employment Act.

vi) Talent management strategy

Two participants in the oil and petroleum company, E2 and E7, identified talent management strategy as one of the achievements in the system implementation process.

According to respondent E2,

> "…we have talent management—the idea is my view of what I want to achieve in life and that of my superior need to align. What we are doing now is upgrade in another system outside SAP and that system will speak to SAP, by feeding your information into it. With that you can have an agreement with your manager of your future endeavours".

Respondent P7 identified talent management as a strategy achieved by stating that "talent management is used for succession planning" in the supermarket and clothing retail sector.

vii) Performance management strategy

The supermarket and clothing company is able to identify performance management strategy as one of the achieved strategies, although performance management in both retail companies is not on *SAP HR* (Chapter Five, section 5.1.6), according to P4.

IQ1.2.2: Are there any management incentives and target bonuses given to the HRIS users?

In the oil and petroleum company, three (3) of the participants—E6, E8 and E9—agreed that they do have incentives such as when an employee comes up with a new idea that will have an impact on the HRIS. According to respondent E8, "we have a system that if you come up with a good idea and it impacts on the system we use, you get rewarded for it". Seven of the participants—E1, E2, E3, E4, E5, E7 and E10—gave a negative indication that the company do not give any incentives for using *SAP HR*. E2 said "no because it is our job to use the system; the system enables us to do our job properly, so there is no need for incentives".

E4 said that

> "…the years 1998 to 2000 people that were supporting the system are SAP accredited with their skills and competencies; they use to get paid some special allowances. So as skills started developing internally the special allowances was [sic] phased out".

In the supermarket and clothing company, all participants gave a negative response, indicating that they do not receive incentives for using *SAP HR* because using the system is part of their job. Respondent P4 indicated that "SAP is seen as administrative tool and if you are utilising SAP and you are doing your job, there is no point compensating you beyond your salary". Respondent P1 said that "we do give our store managers incentives and they are the users of SAP system, but not of HR components". P7 stated that "incentives are not a good motivator to SAP users, for data integrity".
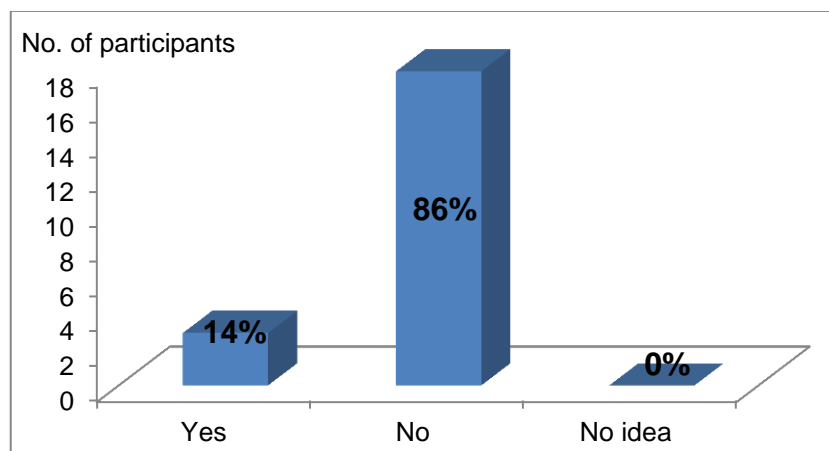
Figure 4.7: Participant opinion of organisations incentivising employees who use HRIS

In figure 4.7, 14% of the participants (3 of the 21) agreed that they do have a special incentive that is paid to any one that comes up with a new idea that could have a positive impact on the system. However, 86% of the participants (18 of the 21) stated that there are no incentives paid to system users. The supermarket and clothing participants argued that incentives are not a good motivator for data integrity.

IQ1.2.3: How effective is the capturing, recording, and retrieval of data on the HRIS?

In the oil and petroleum company, all the participants identified recording of data as being effective. However capturing and retrieval of data are not as effective as expected due to poor quality data and the non-compliance of employees in the time it takes to produce their documents to be captured by the HR department. Recording of data, which is automatically done by the system, is determined by the

quality of data captured by the data capturers. An error in the data captured will automatically affect the recorded data, which will also have a negative impact on the retrieved data (garbage-in-garbage-out). In other words, the problem is not from the recording of data but rather in the capturing of data. Also, the non-compliance of employees to adhere to the time lines in which to submit documents for updating is also part of the problems that could affect the effectiveness of data in the system. E7 mentions that "the timelessness of personal data is a problem; some employees get married and not been able to inform us early so as to have a change in the medical aid, change of address, not able to regularly update their qualifications". E9 said that "the retrieval of data from the system does not produce standard reports; you need to come up with your own idea of what you want in the system".

E4 also said that:

> "…the system is effective, however the extraction of information goes together with the validity of the data, the variant is not automatically updated, someone has to go up to update the variant so that when you pull a report, it will add that new one in. That dynamism unfortunately I could not see it there".

In the supermarket and clothing company all the participants agreed that the recording and retrieval of data are effective, but the capturing of data and the poor functionality of the system are where the problems lie. The difference between capturing and recording data is that recording is dependent on the capturing; poor quality of data captured will automatically mean that the data recording and retrieval are also poor, and if the captured data is correct, then the recording and retrieval will be correct. Respondent P1 said: "I can tell you that the recording and retrieval is very effective, but I think we can always work on the capturing of data". P5 said that "I think SAP in particular is tedious and there are [sic] too much of a process to achieve one simple thing, which boils down to competence of employee and experience in that particular area".

P11 also comments that:

> "…when capturing data, you can skip any un-captured data and the system will not compel you to, the screen comes up and you can skip it and go to next. This is because the system is not well programmed. So I would say it's somewhat ineffective in a functional way".

Respondent P4 said that "only pieces and pieces of information are on SAP, not all information is [sic] captured on the system".

In both companies, all 21 participants agreed that *SAP HR* is effective, but the capturing of data and the accuracy of report generation are not as effective as expected because of the non-compliance of personal details. Also, the variant of updating the system is not automatic in the oil and petroleum company. In the supermarket and clothing company, lack of competence and experience of the users and poor functionality of the system are part of the causes of the system's ineffectiveness.

IQ1.2.4: Has the HRIS been able to provide confidentiality, privacy and security of personal information of the employees?

All the participants in the oil and petroleum company stated that HRIS does provide confidentiality, privacy and security of the personal information of the employees. Users require a username and password to login; a confidentiality agreement is also signed before access is given to the users. According to respondent E6, "we have dedicated authorisation and access team; most of our automated workforces were people request for access and we make sure that there is built in manager approval and system owner approval before you can have access to the system". Respondent E5 said that "we need a login access and also sign a confidentiality agreement contract in HR and IT in terms of movement of documents, there are shedders in and around the 8th floor, we are not allowed to take information on flashers". Respondent E4 said that "I do concern over the access to the system which is normally role based, I could have access to the HR area that is more than what I actually need and I think it poses a security risk".

Respondent E9 mentioned that:

> "…as you move from one position to another, you will only have access to that roll that you are at present, the only problem is if for instance someone is moved from payroll administration to a clerical position which got nothing to do with payroll, he should not have access to HR which is not always the case".

Participants P1 to P11 of the supermarket and clothing company indicated that the system provides confidentiality, privacy and security of employees personal details because only the HR people have access to SAP. They need a login name and password and also a confidentiality agreement is signed before access is given. P11 said that "only the HR community that can access the information with their username and password, also anything you do will be traced back to your login

name". Respondent P8 mentioned that "for instance, I cannot go into the system to view the salary of anyone; it is highly secured information that can only be accessed by certain people and there must be a reason for requesting information of that nature".

In both companies, all the participants (21) stated that the HRIS they use provides confidentiality, privacy and security of the personal information of their employees. This is done by users signing a confidentiality agreement and a user name and password before access is granted to the system.

RQ2: How do organisations utilise HRISs in order to achieve the benefit thereof in the retail sector?

The rationale for this question was to establish how organisations use the HRIS in order to measure the benefit that comes with the system by looking at the modules in the HRIS in both retail outlets. A further reason for the question was to explore how they use the system for their decision making processes.

SRQ2.1: What are the HRIS modules the retail sector uses to have an effective system in place?

IQ2.1.1: Indicate which of these modules are in the HRIS of your organisation?

The following modules are identified as being used in the companies: Payroll; Time Management; Benefit Management; HR (MIS); Recruitment and Learning; Performance Management; Employee Self-service; Reward Management; Absenteeism Management; And Analytics.

i) Payroll
In the both companies, all the participants stated that they use the payroll module on *SAP HR*. E4 mentioned that "the payroll is the sum of all financial records of salaries for an employee and that includes wages, bonuses and deductions".

ii) Time management
All the participants in the oil and petroleum company acknowledged that they do use the time management module on *SAP HR*. However, E4 indicated that "we only use Kronos for time management at the refineries" so as to be able to monitor individual commitment to work.

In the supermarket and clothing company, eight (8) of the eleven (11) participants—P1, P2, P5, P6, P8, P9, P10 and P11—agreed that they do have time a management module, but they use Kronos and not *SAP HR* for time management. According to P1, "on time management we are able to monitor the amount of time people spend on the job. We use Kronos for time management, scheduling and absence management". P3, P4 and P7 did not comment on the question.

iii) Benefit administration

In the oil and petroleum company, all but one participant (E5) confirmed their knowledge of the existence of the benefit administration module in use on *SAP HR*. In the supermarket and clothing company, 9 of the 11 participants know of the benefit administration module in *SAP HR*.

iv) HR (Management Information System)

In the oil and petroleum company, all the participants gave an indication that they do have the HR (MIS) module in *SAP HR*.

In the supermarket and clothing company, eight (8) of the eleven (11) participants (P3, P6 and P7 excluded) gave a positive indication that they do have the HR (MIS) module in *SAP HR*.

v) Recruiting and learning system

Nine (9) of the participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—in the oil and petroleum company acknowledged that they do have the recruiting and learning modules but are not having both on *SAP HR*. The recruiting module is operated on the Neptune system and the learning module is on *SAP HR*. E7 said that "our base system does have a recruitment module, but is not in use at the front end interface". Respondent E1 said that "I think it will be a good idea to have recruitment in SAP so as not to capture recruitment data twice, in Neptune and later in SAP, not a good idea".

In the supermarket and clothing company, all the participants gave a positive indication that they do have a recruiting and learning module; however, P1 and P4 made it clear that they have the learning module for training information on SAP but the recruiting module in SAP is not in use. P4 said "as I mentioned before, recruitment is done manually and not in SAP".

vi) Performance record

In the oil and petroleum company, the performance record module is used in *SAP HR,* according to all the participants. E10 stated that "performance appraisals are done on the system".

In the supermarket and clothing company, participants P5, P6 and P8 indicated that they do have the performance record module in SAP. Respondent P5 indicated that "they are in the process of bringing in [the] performance record module into SAP in this current year 2015". However, five (5) of the participants—P1, P2, P4, P7 and P11—disagreed with the views of P5, P6 and P8 and stated that they do not have a performance record module in *SAP HR*. P3, P9 and P10 did not know if there is a performance module in SAP.

The oil and petroleum company makes use of SAP for performance records. The supermarket and clothing company does not use SAP for performance recording, but they are working towards having it on SAP in the current year.

vii) Employee self-service (ESS)

The ESS module in *SAP HR* is used by the oil and petroleum company, according to all the participants. E2 defined "ESS as a module that provides employees with access to their personal records and other payroll details".

In the supermarket and clothing company, eight (8) out of eleven (11) participants stated that they do not have the ESS module in *SAP HR*. Respondent P7 said that "there is a need to include the ESS module to empower people to do things on the system by themselves".

viii) Scheduling

In the oil and petroleum company, eight (8) of the ten (10) participants (E5 and E6 excluded) stated that they do have the scheduling module on *SAP HR*. In the supermarket and clothing company, ten (10) of the eleven (11) participants indicated that scheduling module is on a separate system called Kronos and not on SAP. P7 did not comment on the question. The two companies do have scheduling modules. The oil and petroleum company has on SAP, whilst the supermarket and clothing company uses other systems for scheduling.

ix) Absence management

In the oil and petroleum company, nine (9) of the participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—indicated that they do have an absenteeism management module that they are using in SAP. In the supermarket and clothing company all the participants knew about the absenteeism module, but P1, P5 and P6 said they use the module in the Kronos package.

x) Analytics

In the oil and petroleum company, nine (9) of the ten (10) participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—gave a positive indication that they do have the analytics module in SAP but that the degree of usage is questionable. E4 mentioned that "in the analytics, the degree of usage is a concern".

In the supermarket and clothing company, seven (7) of the eleven (11) participants—P1, P2, P4, P7, P8, P10 and P11—gave a positive indication that they do have the analytics module in SAP, but that it is underutilised. According to respondent P2, "we do have analytics, but it is not fully utilised to the betterment of the organisation". P3, P5, P6 and P9 have not responded to the question.

xi) Other identified modules

In the oil and petroleum company, four (4) participants—E1, E2, E3 and E5—identified other modules in the HRIS of their organisation as organisational management, employee compensation management, management self-service (MSS), and talent management modules, although talent management is not in SAP but on a system called Nakisa. According to E1, "talent management is on Nakisa". Participants E7 and E8 also mention an IR system as one of the modules on *SAP HR*. According to respondent E9, "the IR system is used for information relating to employees that are suspended, dismissed and CCMA cases".

In the supermarket and clothing company, participants P1, P4 and P6 identified employment equity, EMPS discipline and grievance records as other modules in SAP. Respondent P4 identified "employment equity for race and gender issues". Respondent P6 identified "EMPS for fingerprint and criminal/financial record check". Respondent P1 said that "there is future work been done on discipline & grievance records".

Table 4:2: Summary of modules in the HRIS (SAP) of both companies

S/No	Modules in the HRIS	Oil and retail company	Supermarket and clothing company
1	Payroll	Yes	Yes
2	Time management	Yes (Kronos on one refinery)	No (on Kronos)
3	Benefit administration	Yes	Yes
4	HR (Management Information System)	Yes	Yes
5	Recruitment	No (on Neptune)	No (done manually)
6	Learning systems	Yes	Yes
7	Performance management	Yes	No (WIP for 2015)
8	Employee self-service (ESS)	Yes	No
9	Scheduling	Yes	No (on Kronos)
10	Absence management	Yes	No (on Kronos)
11	Analytics	Yes	Yes
Others	Talent management	Yes (on Nakisa)	Nil
	Organisational management	Yes	Nil
	Management self-service (MSS)	Yes	Nil
	IR system (CCMA matters, etc.)	Yes	Nil
	Employee equity administration	Nil	Yes
	EMPS (fingerprint check)	Nil	Yes
	Discipline and grievance (WIP)	Nil	Yes
	SARS administration	Nil	Yes

IQ2.1.2: Do the modules suit the kind of business that your organisation operates on?

The rational for the question was to establish if the modules in the HRIS system used by both companies suit the business.

All the participants in the oil and petroleum company agreed that the modules suit the business needs and support the HR key processes. According to respondent E7, "it addresses all HR key processes which are the key to our organisation and the business we do". Respondent E5 said that "going back to the customisation, I find that *SAP HR* has the potential to provide most of the functionalities; it just depends on the manager that is there at that time and what he wants".

Most of the supermarket and clothing company's participants—P1, P2, P3, P4, P6, P7, P8, P9, P10 and P11—agreed that the modules suit their business needs but

they need to combine certain functionalities and include other modules on *SAP HR*. According to respondent P1,

> "…I would still like to see discipline and grievance records because that would make a huge difference in the amount of administration that we have to do around this and also combine the modules from hiring up to printing of [the] appointment letter be one on SAP because we have to go a long process manually to do that and this is not proper. Also include other modules in Kronos into SAP".

P5 indicated that the modules do not suit their business (Chapter Five, section 5.1.1) because the system is still manually inclined and not all the required modules are used in the system. The majority of the respondents however gave a positive response to the answer.
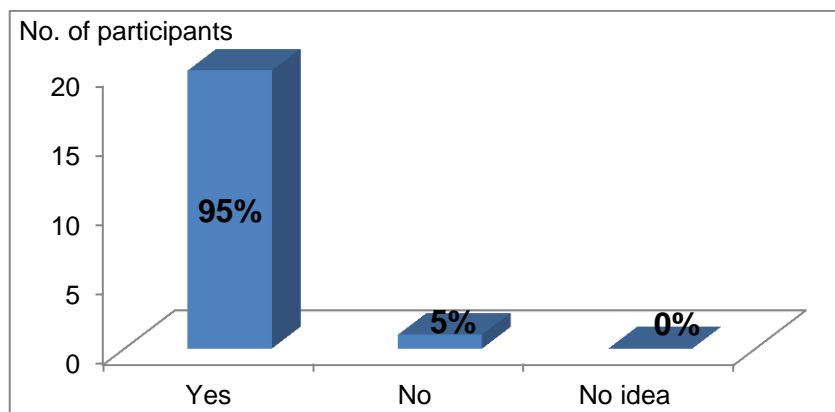
Figure 4.8: Participant indication on whether HRIS modules suit the retail business

Figure 4.8 indicates that 20 of the 21 participants (95%) in both companies agreed that the modules in *SAP HR* suit the needs of the companies in terms of addressing the key HR processes, but there is a need for modification of the system and the inclusion of more modules.

IQ2.1.4: Does your organisation upgrade the HRIS and software development?

All the participants in the oil and petroleum company indicated that regular upgrades of the SAP HR system happens at least twice a year and the upgrades are done by the IT department. Upgrades are usually conducted when there is a new release from the vendor and when there are legislative instructions such as changes in tax and interest rates. Respondent E1 stated that "we do upgrades at least quarterly, we

do it only when SAP releases their updates, then we follow suite. We also do update[s] when there are changes in interest rates and taxes from SARS". Respondent E2 said that:

> "…SAP has their own process of how they manage their upgrades and because of our licencing agreement we hook up to that for our upgrades, which is approximately every 18months. The upgrade does bring in some new functionality and costs a whole lot of money, but we might decide to take or leave it".

Six (6) of the eleven (11) participants—P3, P5, P8, P9, P10 and P11—of the supermarket and clothing company stated that the company do upgrades on *SAP HR* and the users are notified on when and what will be affected during the upgrades. Respondent P5 stated that:

> "…we do upgrades and am [sic] aware for the fact that we continuously do retraining on anything new in the system. Obviously SAP is more for the retail which is more of the priority, HR is not our main function; our main function is trading. The system will obviously be scared of that, and HR is a support function".

Five of the participants—P1, P2, P4, P6 and P7—claimed that the company does not upgrade because there has never been any change in the *SAP HR* system. According to respondent P7, "for about 2 years now, since I joined the company, there has not been any upgrade. But in terms of backups, we do that on a regular basis". Respondent P6 also said that "I have been working here for 3 years and since then till now we have been using the same applications. It has never been upgraded till this day".
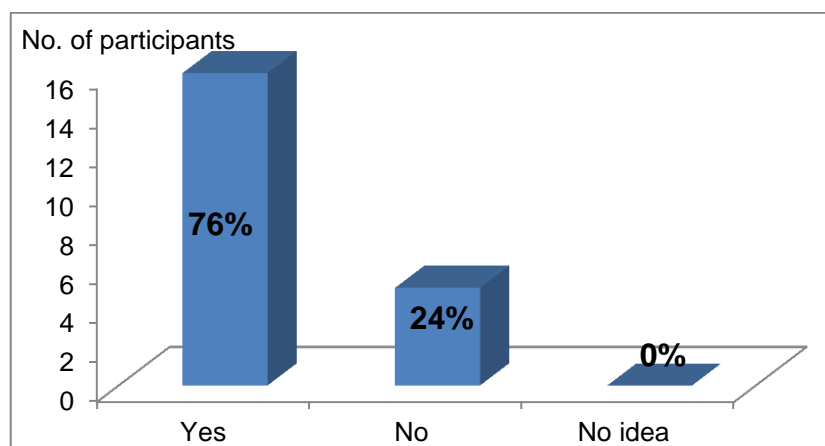
Figure 4.9: Knowledge of participants on regular HRIS upgrades

Figure 4.9 indicates that in both companies, 76% of the participants (16 of the 21) confirm that the companies do upgrades, but such upgrades are influenced by cost, compatibility, and legislative compliance. 24% of the 21 participants (5 from the supermarket and clothing company) indicated that there has not been any upgrades for many years, and that the company regards the system as a support system and not critical for the business.

IQ2.1.5: How would you rate the contribution of HRIS to the sustainability, continuity and profitability of your organisation?

In the oil and petroleum company, participants E1, E3, E4, E5, E6, E8, E9 and E10 rated the contribution of SAP HR to the sustainability, continuity, and profitability high because the system is regarded as important and used for manage their employees.

Respondent E6 said:
> "…this place will come to a halt if there is no HR system, it will not happen overnight like the financial systems that you cannot serve customers. But within 72 hours at least, we are going to feel the pressure, when people cannot capture their shift, leave and so on, they will not be paid and that can cause an industrial action".

Two participants, E2 and E7, rated the *SAP HR* contribution to the sustainability, continuity, and profitability as *medium*. They argued that *SAP HR* is not the most critical system for the business, therefore the medium ranking. According to E2,
> "…without the system, we would not be able to know how many people are employed at a particular point. I would not say high because we are a support division, not the sales division. The system supports in terms of making sure that data captured is accurate, credible, and properly maintained".

The supermarket and clothing company's participants (P1, P2, P5, P6, P8, P9, P10 and P11) rated the contribution to the sustainability and continuity *high,* but they indicated that importance depends on the accuracy of the data captured by the users as HR decisions are based on the system. Respondent P1 said that "we base all our decisions on it, our staffing which relates to how profitable the store is, how people get paid. If we don't have that, we will be in a very difficult situation". Respondent P8 further stated that "provided that the people using the system are using it correctly, for instance if the inventory is not captured correctly, there will be

losses". Three (3) participants—P3, P4 and P7—rated the contribution *medium* because they do not see SAP as a contributor to the profit of the business, but for sustainability purposes it does assist to keep proper record of employee information as compared to when there was no system. Respondent P4 said that "we are able to keep certain records; we are coming from [an] environment where there was no system, so I wouldn't rate it low because I am complaining about it, though the business has done something by acquiring the system".
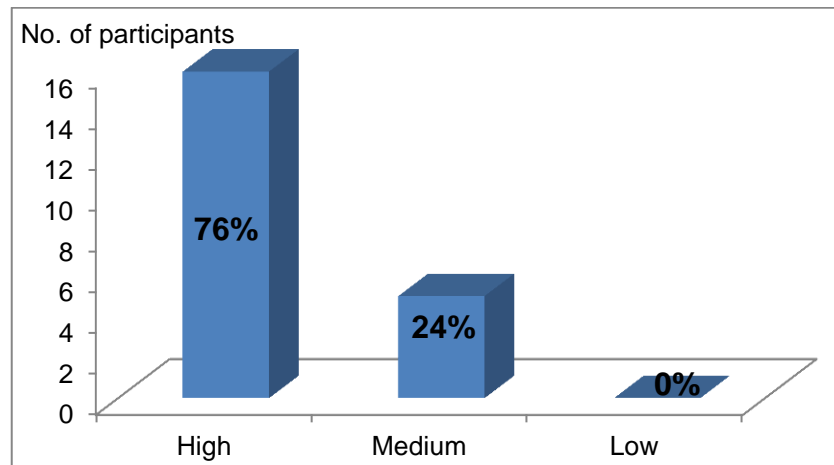
Figure 4.10: Participant perception of HRIS contribution to sustainability, continuity, and profitability

Figure 4.10 indicates that in both companies, 76% of the participants (16 of the 21) agreed that the system does contribute to the sustainability and continuity of the organisation, which is determined by the accuracy and effectiveness of the data captured. In the oil and petroleum company, *SAP HR* is regarded as one of the most important systems to be uploaded in case of disaster and for business for continuity. Twenty-four percent (24%) of the participants (5 of the 21) rated the contribution of *SAP HR* as *medium* because they do not see SAP as the most critical for the business.

SRQ2.2: How do organisations use HRISs in their decision making processes?

The purpose of this question was to identify if the retail companies are using the HRIS effectively in their decision making processes.

IQ2.2.1: Is the HRIS regarded as an administrative or strategic tool?

Four of the oil and petroleum company's participants—E2, E8, E9 and E10—stated that *SAP HR* is used as an administrative tool because HR is regarded as a support function.

According to respondent E8, "depending on where and [in which] department you are, in the HR I would think it is administrative. The strategic aspect might refer to the retail, marketing departments, etc." Participants E4, E6 and E7 said that *SAP HR* is regarded as a strategic tool but the administrative part is important. Respondent E6 stated that "I would say primarily strategic because of the investment we made in terms of the organisational development functionalities, but administration comes first. But been in the environment we are now, I think the focus has changed to enable interesting strategic drivers". E1 indicated that *SAP HR* usage is the combination of administrative and strategic tasks. The usage starts with administrative tasks of capturing data and ends with strategic information for decision making. According to respondent E1, "I think is both; it starts with the admin part of capturing enormous amounts of data and ends up as strategic outputs of using the information to make decisions". Two participants—E3 and E5—indicate that *SAP HR* usage will be depending on the person that is using the system; the administrators use it for administrative functions and the management uses it for strategic decision making.

Five participants—P2, P3, P4, P5 and P8—of the supermarket and clothing company indicated that *SAP HR* is used for administrative tasks. Respondent P5 said that "in our current environment and in my opinion, I would say it is an administrative task rather than strategic; in the business we are transactional, but we are moving to a transitional process of becoming more of strategic in the near future, but for now we are transactional". Participants P6, P7, P9, P10 and P11 stated that *SAP HR* usage is the combination of both administrative and strategic tasks whereby the administrators do the capturing of data and management uses the information to make decisions. P7 said the following: "I think it is on both sides; in terms of administration it deals with a lot of capturing of data, but strategically it helps the management to make decisions on when to employ and who to employ".
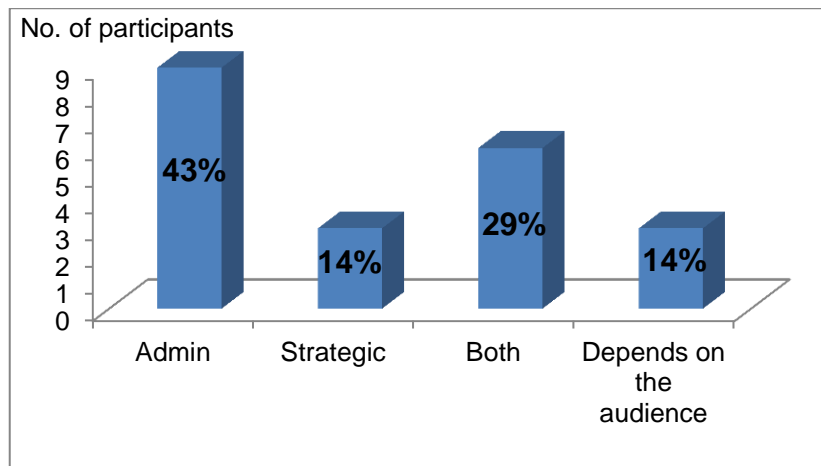
Figure 4.11: Participant opinion on administrative/strategic tasks of *SAP HR*

Figure 4.11 presents how the HRIS is regarded by the participants. Forty-three percent (43%) of the participants (9 of the 21) indicated that *SAP HR* is used for administrative tasks. The oil and petroleum company specified that *SAP HR* is used as a support function and does not contribute to the profit of the business whilst the supermarket and clothing company uses the HRIS for administrative purposes.

IQ2.2.2: Is HRIS represented at the managerial level in your organisation?

The HRIS is represented at managerial level in terms of its usage and position in the management level of the oil and petroleum company according to all the participants—E1 to E10. For example, E2 stated: "Yes, to the highest level and they use the MSS and ESS as well". Respondent E8 supported E2 by saying, "yes, every manager, especially the performance management side, they have to use the system for that".

In the supermarket and clothing company HRIS is used up to management level which is an indication that the system is represented at the highest level of the company. P2 said: "Yes, very much, our deputy CEO (Chief Executive Officer) is an IT specialist". Respondent P5 mentioned that "every member of management works on SAP. The levels of work will indicate what transaction you use, your director will pull more reports and do more strategic reports that he will use for his analysis and not be inputting information into the system".

IQ2.2.3: How would you rate management satisfaction with the HRIS?

In the oil and petroleum company, five (5) of the participants—E2, E3, E4, E6 and E10—rated management satisfaction *high* because there is less complaints from the management with regard to the system. Respondent E10 said that "we do not use to have a lot of complaints from the management, which shows that they are satisfied with the system". Five of the participants—E1, E5, E7, E8 and E9—rated management satisfaction *medium* because of the low level of outputs in terms of reports that is generated for management. According to respondent E1, "every time management want something, they come back to us. We should print this or prepare that for them. All management want is that with the press of one button, they get what they want". Respondent E7 also commented that "they would like more outputs in terms of intelligence, meaning reporting analytics, but the technical base/infrastructure of the system would be high".

In the supermarket and clothing company, six (6) of the participants—P1, P2, P3, P6, P10 and P11—rated management satisfaction high because they believe that the system does the job that is expected of it and they depend on the system to do their job. Respondent P1 stated that "I cannot necessarily say that their belief is the same as mine; I use the system daily and I cannot work without the system. I do not understand how people can do their job daily when they do not enter the system". Respondent P11 said that "it can be medium but can be better so I would go high, but some things that upset me about the system like the inconsistency, errors and things that can be enhanced in the system. But it can be made better".

P5, P7, P8 and P9 of the supermarket and clothing company rated management satisfaction as *medium* because some of the managers still do not have confidence in the new technology, and the accuracy of data is in question. According to respondent P5, "we sometimes question what is captured in the system that is where we are concerned so when we draw a report, it is not accurate or updated because people are not capturing the accurate data. When you see a report you need to double check it for verification purposes". Respondent P8 said that "there are people that have been with the company for years and do not believe so much in the new technology. For instance, you draw up a requisition and the CFO (Chief Financial Officer) would prefer to sign the document manually, scan, and send it back to us".
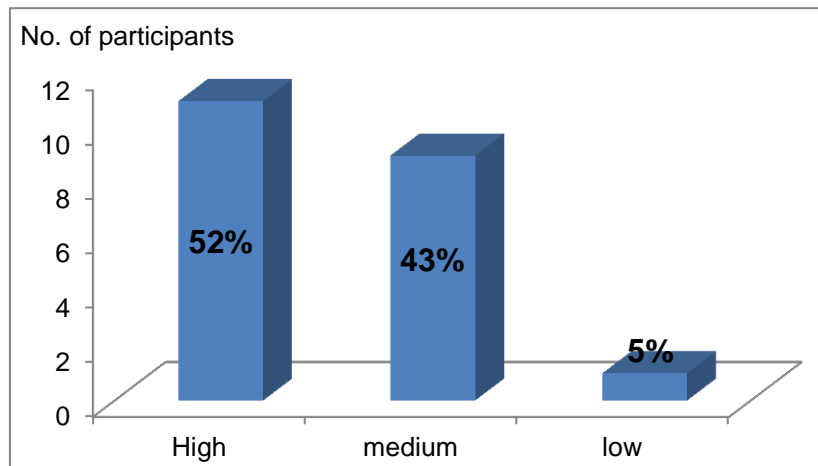
Figure 4.12: Management satisfaction with HRIS

Figure 4.12 illustrates that 11 of the 21 participants (52%) in both companies rated management satisfaction *high* because most of the managers depend on the system to do their job. Nine (9) of the 21 participants (43%) rated management satisfaction *medium* because some of the members of management still have doubts on the quality of data captured and also the level of output in terms of the reports generation. In the supermarket and clothing company, some members of management do not trust the new technology and perform some functions manually.

IQ2.2.4: How would you rate staff satisfaction with the HRIS?

In the oil and petroleum company, participants E2, E3, E4, E6, E7 and E10 were of the opinion that staff satisfaction is high as there are less complaints coming from the employees currently as compared to the past. Respondent E6 stated that "over the past years, we have had fewer than 100 complaints as compared to about 3000 before the introduction of the HRIS which makes the staff satisfaction high". E1, E5, E8 and E9 stated staff satisfaction to be medium because some of the employees still struggle to use the ESS module in the system. Not using the system regularly complicates the use of the system. Respondent E8 indicated the following: "I think those in the HR use the system everyday so they have to make it work every day. But for the employees in general, some still struggle to use the ESS module".

In the supermarket and clothing company, five (5) of the participants—P2, P3, P6, P8 and P11—indicated the staff satisfaction as *high* because there are less complaints from the staff members in relation to their salary accuracy and other HR activities that go through the system. According to respondent P2, "they do not complain when they get the right pay and the right leave; they do not even know

what the system looks like". Participants P1, P4, P5, P7, P9 and P10 rated the staff satisfaction as *medium* because they do not know how the system looks like and do not care about the system. All the employees need to interact with the system in order to get the feeling of satisfaction.
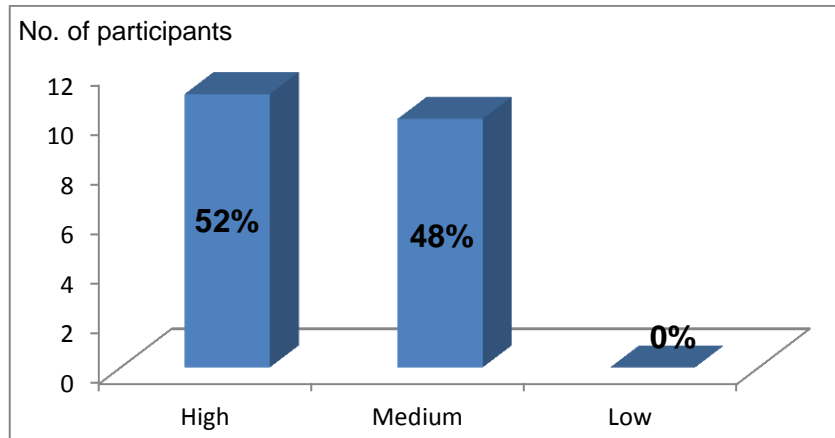
Figure 4.13: Staff satisfaction level of HRIS

Figure 4.13 explains that 52% of the participants (11 of the 21) in both companies rated the staff satisfaction high, based on the fact that there are less complaints as compared to when there was no system; while 48% (10) of the 21 participants rated staff satisfaction as *medium* because of the complexity of the system and the fact that some employees are not interacting with the system.

IQ2.2.5: How would you rank the level of human resource (HR) practices with the use of the HRIS in your organisation?

In the oil and petroleum company, seven (7) of the participants—E1, E2, E3, E4, E6, E8 and E10—ranked the level of HR practices with the use of HRIS high because the HRIS follows procedures that do not change. According to respondent E10, "we are very strict about following the procedures so as to make sure things are done right. Especially from auditing point of view because we fall under the high risks category".

In the supermarket and clothing company, eight (8) of the participants—P1, P2, P3, P6, P7, P9, P10 and P11)—ranked the level of HR practice in the use of the system high because all the HR activities are conducted through the system. According to respondent P1, "it is absolutely linked; everything we do is geared to support the

system. So I would say high because the two are completely aligned". Three of the eleven (11) participants—P4, P5 and P8—ranked the level of HR practices in the use of the system *medium* because they do not have all the required packages on *SAP HR*. According to respondent P8, "there is no link between receiving recruiting number and placing; the link is only after recruiting that you can now capture the person on SAP".
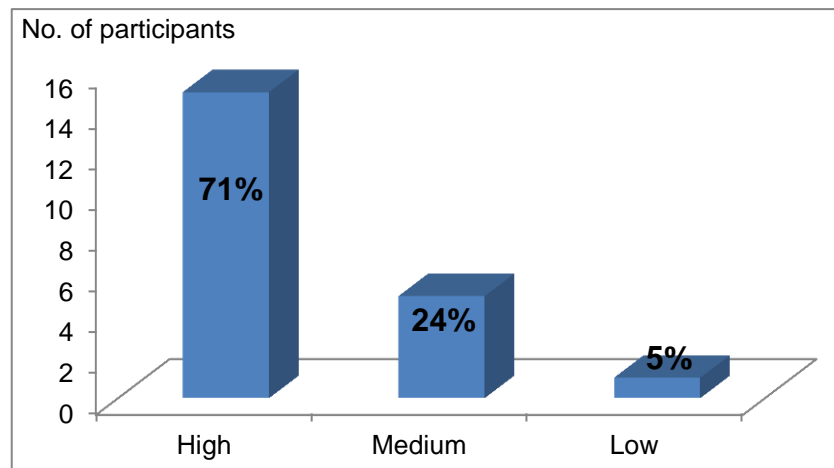
Figure 4.14: Level of HR practices using HRIS

Figure 4.14 show that 71% of the participants (15 of the 21) in both companies ranked the level of HR practices with the use of the system *high* because HR depends on the HRIS with embedded governance.

IQ2.2.6: Is the HRIS able to contribute to the efficiency and effectiveness of your departmental activities?

In the oil and petroleum company, all the participants agreed that the HRIS contributes to the efficiency and effectiveness of the HR activities through the business process automation and reporting. Respondent E6 commented that "as I mentioned, through business process automation and through things like reporting and analytics, these two will stand out for me". Respondent E4 said, "Most definitely, obviously the system is good if the inputs are ok".

In the supermarket and clothing company, participants P1, P2, P3, P5, P6, P7, P8, P9, P10 and P11 gave a positive response that the HRIS is able to contribute to the efficiency and effectiveness of the HR activities through the automation of the HR

activities. Respondent P3 was of the opinion that "previously we had to do manual count of the staff in the stores and draw a report of head count. But now with a touch of a button we can draw a report of the head count. The system could give you a report of active and inactive employees". Respondent P11 said yes, it is expected that "if you have your performance management module in the system, it will be so much better because at the moment it is done in excel".
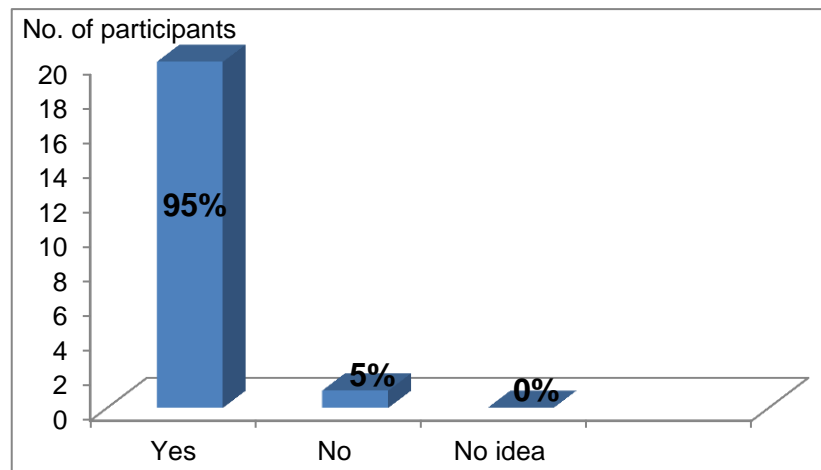
Figure 4.15: Participant opinion of HRIS contribution to effectiveness and efficiency

Figure 4.15 shows that 95% of the participants (20 of the 21) agreed that HRIS implementation contributes to the effectiveness and efficiency of their HR activities through the business process automation and reporting in both companies.

IQ2.2.7: What are the benefits that you could identify that your organisation has been able to achieve in the implementation of an HRIS?

In the oil and petroleum company, six (6) of the ten (10) participants identified the following benefits gained from using the HRIS. On using the ESS module, the respondents said the following: Respondent E1: "People are empowered to do their own things on the system". Respondent E2: "We are able to see which area is carrying vacancies and how long they have been carrying them". Respondent E4: "The system [is] properly designed for internal control purposes". Respondent E5: "…automation of form". Respondent E6: "…business process automation". Respondent E7: "…one single platform".

In the supermarket and clothing company, five (5) of the eleven (11) participants identified the following benefits that were achieved since the implementation of SAP: Respondent P1 said: "…standardisation of the system, which led to one template of contract letter of appointment". Respondent P2 argued that "speed, efficiency and consistency" is a benefit when compared to the old system. Respondent P3 stated that "with the system in place, it has helped to minimise the loss of relevant documentations". Respondent P4 concluded that "we have records of people in terms of training and development on SAP, those are the benefits". Respondent P10 said: "I think the system assist[s] to identify anyone that has been previously fired for negligence, fraud or any form of malpractices".

IQ2.2.8: Does your organisation have any form of policy, guideline or framework in place for the effective implementation and maintenance of the HRIS?

In the oil and petroleum company, all the participants gave a positive indication that they do have policies and procedures to follow in the use of the HRIS in terms of alterations and amendments that need to be made in the system. Respondent E9 commented as follows:

> "Yes, there is a policy in place for that; there is [sic] a lot of approvals, for instance if you need to make changes, that lies with the HR intelligence and reporting department, they give the authorisation to the IT department to make changes if need be in order to fall according to the policy".

In the supermarket and clothing company, nine (9) of the participants—P1, P2, P4, P5, P7, P8, P9, P10 and P11—were of the opinion that they do have policies in place in order to use the system, but such policies are not documented. Respondent P11 said that "yes, it does have, but like I said, there is not enough in terms of consistent use. But we do have general guidelines on how to make use of the system". Respondent P4 said "yes, there is a guideline in place, in terms of procedures to follow in training a person but is not a written documentation, though it is not a written policy, but everyone in the company knows the procedures before using the system".
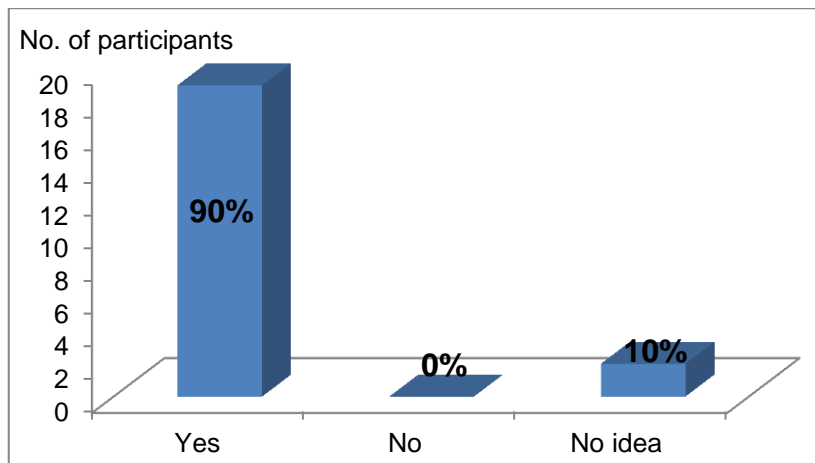
Figure 4.16: Participant awareness of policies/guidelines on using HRIS

Figure 4.16 shows that 19 of the 21 participants (90%) in both companies indicate that they do have policies and procedures to follow in terms of the system usage as well as making alterations and amendments to the system. With such procedures, there are authorisations that have to be made for these amendments to take place.

IQ2.2.9: Are you totally satisfied with the HRIS or will you recommend that your organisation should acquire an alternative system?

In the oil and petroleum company, nine (9) of the participants—E1, E2, E3, E4, E6, E7, E8, E9 and E10—indicated that they are satisfied with the HRIS. E9 responded by saying the following: "I think I am satisfied with the system, all we need is more training among the employees so that everyone could be able to work on the apps available for them. It is all there, all they need is to know how to use it". Respondent E4 said: "I think I am satisfied with the system. We came from PeopleSoft and compared the usage and personal satisfaction, then realised that SAP is more efficient and do not expect any other system". E5 disagreed because the system is not customised enough to suit the business. According to respondent E5, "I think *SAP HR* works, am just not comfortable with the customisation".

In the supermarket and clothing company, nine (9) of the participants—P1, P3, P4, P6, P7, P8, P9, P10 and P11—are satisfied with the system, however the low level of usage and also not having all the modules on the system are the issues that still need attention. According to respondent P4, "it is a very good system and the company train[s] everyone that uses the system, but I feel there is room for improvement. The system is not fully utilised, there is no gap in SAP, but there is

gap in the utilisation of certain packages of the system that [are] not being utilised".
Respondent P1 said:

"…am very happy with it; I worked with it in my previous company and am
happy when it came in here. I do feel that people that does [sic] not have
experience of the system does [sic] not use it for what it is meant for, and I
discuss that with my team because I know some people do not use it, so I
think it is just that barrier".
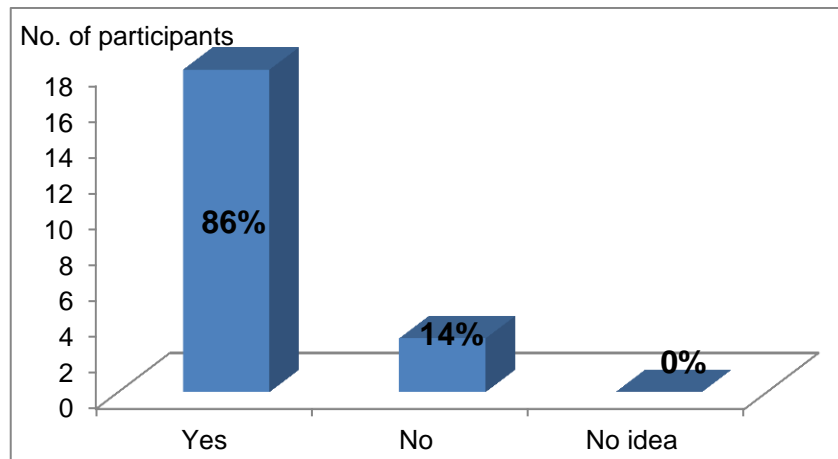
Figure 4.17: Number of participants satisfied with HRIS

Figure 4.17 shows that 86% of the participants (18 of the 21) from both companies
agreed that they are satisfied with the system because of the advanced technology
when compared to the previous system. In the supermarket and clothing company,
the complexity and lack of experience by the users are part of the reasons for non-
satisfaction of the system. Not all the modules are used in the system and this too
affects the satisfaction level with the system.

*IQ2.2.10: What are the future expectations of your organisation with regard to the
implementation of the HRIS?*

i)   Oil company

In the oil and petroleum company, seven (7) of the ten (10) participants commented
on some of the future expectations as follows: Respondent E1: "…automation and
integration of a lot of things in the system". Respondent E2: "…to expand all the
loose HR process[es] into one portal". Respondent E3 said that "the completion of
the talent management module and recruitment module are things that need to be
implemented in the SAP system". Respondent E5 said, "Getting people who are
open to learning the system". Respondent E4 said: "I would expect that in future we

should be advanced in such a way that people don't have to come in and sit in the office to do their job; they could sit at home and just work online, only to come in for meetings".

Respondent E6 said:

"…from an end user perspective, I think the goal will be simplification and consolidation. People still have too many places to go to, to perform certain functions". Respondent E9 said that "SAP need[s] to be programmed in such a way that documents need to be scanned into the system so as to eliminate a lot of filing of documents for safety keeping".

ii) Supermarket

In the supermarket and clothing company, five (5) of the participants commented on their future expectations as follows: Respondent P1 said: "…to look at part of the HR strategy is to see what can be centralised and what should be part of shed services". Respondent P2 said: "I think it must just get better; all you have to do is to improve on it and SAP seems to be the prevailing stronger system. It is for the management to decide how much luxuries they would want to have and that is the catch".

Respondent P4's expectations include "the improvement of the system, utilising it better and adding other packages which are not been utilised now". According to P8, "improve in the system, make it more electronic, efficient, and eliminate paper work. Everything should be systemised".

Respondent P9 said: "I think in terms of the organisation, we would want our system to link to the latest technology. By maybe the system could be a touch screen were you just touch and the report you want will just generate without stress". System that keeps up to the technology advancement

4.5   SUMMARY OF FINDINGS

In the summary of findings of the two cases the researcher was able to identify the findings from both retail companies. The summary of findings from the interviews is listed in the tables below.

4.5.1   Summary of findings for Research Question 1

Summary of findings for RQ1 are presented in Table 4.3 and Table 4.4 below.

Table 4:3: Summary of findings from interview questions relating to SRQ1.1

IQ	Summary of findings from both companies
IQ1.1.1	**1.** *SAP HR* is used by both companies as the HRIS of choice **2.** Both companies supplement their *SAP HR* system with additional support systems
IQ1.1.2	**3.** There is no standardised HRIS for the retail sector **4.** *SAP HR* is the system of choice for the two cases in this study **5.** In both companies, *SAP HR* needed to be customised to suit the business needs of the specific company.
IQ1.1.3	**6.** In the oil and petroleum company, they do not capture the information of all employees on SAP **7.** In the supermarket and clothing company relevant details of all employees are captured on SAP for legislative purposes
IQ1.1.4	**8.** Not all employees have access to the *SAP HR* system
IQ1.1.5	**9.** Both companies conduct training and assessment, and a competency agreement is signed before access to the system is granted **10.** In both companies, training is a prerequisite to gaining access to the SAP system **11.** In both companies, training is conducted in-house
IQ1.1.6	**12.** Both companies have information security in place to support *SAP HR* **13.** The oil and petroleum company has effective authorisation and security team to guard the SAP systems; they also have business recovery and procedures in place in case of disaster **14.** The supermarket and clothing company does not want to disclose the information security they have in place
IQ1.1.7	**15.** Team work when implementing an HRIS is a critical success factor **16.** Users were part of the project team and their inputs were taken into account
	17. Top management supports HRIS implementation **18.** In the supermarket and clothing company, some of the HRIS managers are still manually inclined, which affects the integrity of the system
	19. In both companies, participants are aware of their company's business plan and vision **20.** In the oil and petroleum company, investment on training for SAP certification is part of the business plan
	21. Both companies see software development ability as a critical factor in the implementation process
	22. Project management and project teams are critical for HRIS implementation
	23. Change management is seen as a critical factor during and after the implementation of the HRIS **24.** In the supermarket and clothing company some people are finding it difficult to adapt to changes
	25. The non-documentation of intricate processes causes frustration and a negative environment for the employees **26.** High cost, poor functionality, and complicated systems are part of the problems experienced when implementing the HRIS
IQ1.1.8	**27.** Size is important but in terms of cost savings, coordination and the technology base of the system **28.** Although size of the company is seen as important for data accuracy, consistent usage and training is seen as more important
IQ1.1.9	**29.** In both companies, there is team work and staff participation

IQ	Summary of findings from both companies
IQ1.1.10	**30.** In both companies, there are management confidence and trust in the system, which is determined by the quality of data
	31. In the oil and petroleum company, human error and the date driven approach of SAP affect management trust
	32. The supermarket and clothing environment shows that lack of data accuracy, difficulty in adjustment to change, irregularities of dates, and poor system functionality affect management trust

Table 4:4: Summary of findings from interview questions relating to SRQ1.2

IQ	Summary of the findings from both companies
IQ1.2.1	**33.** The implemented HRISs are not used for recruitment.
	34. The training strategy works well as training on the HRIS is a prerequisite to gaining access to the HRIS.
	35. Both companies achieved their development strategy and use the system to track employees who are trained and those who still need training for transformation purposes.
	36. The reward strategies were accomplished as the main goal was to pay employees their salaries.
	37. Employee relations and employment equity strategies were achieved.
	38. Talent management strategy was achieved but is not through *SAP HR.*
	39. Performance management strategy was achieved but not conducted on *SAP HR.*
IQ1.2.2	**40.** In both companies, there are no incentives for SAP users.
	41. The oil and petroleum company gives incentives for inventive ideas that are implemented.
IQ1.2.3	**42.** The recording and retrieval of data is determined by the quality of data captured by the administrators.
	43. Poor data quality is also caused by the non-compliance, lack of competence, poor functionality and the variant of updating on the system is not automatic.
IQ1.2.4	**44.** The HRISs do have confidentiality, privacy and security.

4.5.2   Summary of findings for Research Question 2

Summary of findings to answer RQ2 are represented in Table 4.5 and Table 4.6 below.

Table 4:5: Summary of findings from interview questions relating to SRQ2.1

IQ	Summary of the findings from both companies
IQ2.1.1	**45.** The payroll of the HRIS is used in both companies.
	46. The oil and petroleum company uses *SAP HR* as well as Kronos for time management. **47.** Kronos, not *SAP HR*, is used by the supermarket and clothing company for time management.
	48. Both companies have the benefit of administration on *SAP HR*.
	49. Both companies have the HR (MIS) module in SAP.
	50. Both companies use the learning module in SAP. **51**. Recruitment is not done in SAP; the oil and petroleum company recruitment is conducted on a system called Neptune, while the supermarket and clothing company manages the recruitment manually.
	52. Performance records are being kept on SAP by the oil company; the supermarket and clothing company uses a separate system for performance records.
	53. The oil and petroleum company does have the ESS module in *SAP HR* while the supermarket and clothing company does not.
	54. Both companies use scheduling systems but only the oil and petroleum company uses *SAP HR* for scheduling.
	55. Both companies have the absenteeism management module but only the oil and petroleum company has it on *SAP HR*.
	56. Both companies do have analytics on SAP, but the degree of usage is a concern.
Other modules	**57.** In the oil and petroleum company, they have organisational management, employee compensation management, management self-service (MSS), IR systems and talent management (on Nakisa) as additional modules to use. **58.** In the supermarket and clothing company they have employment equity, EMPS, and discipline and grievance record (on WIP) as additional modules to use.
IQ2.1.2	**59.** In both companies, the modules suit the business needs but there is a need for modification and inclusion of other modules.
IQ2.1.4	**60.** The oil and petroleum company does conduct upgrades during changes from manufacturers and changes in tax and interest rate. **61.** In the supermarket and clothing company there is uncertainty (60% said yes and 40% said no) whether the company does upgrades **62.** In both companies, SAP is not regarded as critical for the business.
IQ2.1.5	**63.** The HRIS as a contributor to the sustainability, continuity, and profitability is rated high, but the rating is determined by the accuracy of data. **64.** *SAP HR* is not the most critical for the business and is deemed a support system. **65.** In the supermarket and clothing company, *SAP HR* is used for administrative purposes.

Table 4:6: Summary of findings from interview questions relating to SRQ2.2

IQ	Summary of the findings from both companies
IQ2.2.1	**66.** *SAP HR* is mainly used for administrative tasks and is not regarded as critical for the business **67.** Some managers in both companies use the HRIS as a strategic tool
IQ2.2.2	**68.** *SAP HR* is represented at the managerial levels in both companies
IQ2.2.3	**69.** Management are satisfied with the HRIS **70.** Inconsistencies and errors are the problems facing the management
IQ2.2.4	**71.** Staff satisfaction with the use of the system is generally rated high
IQ2.2.5	**72.** The level of HR practices with the use of the system is high because of embedded policies, rules, and procedures within the HRIS
IQ2.2.6	**73.** The HRIS contributes to the efficiency and effectiveness through business process automation and reporting
IQ2.2.7	**74.** Oil and petroleum company benefits are use of ESS module; identify any overdue available vacancies; system properly designed for internal control purposes; automation of form; business process automation; and one single platform **75.** Supermarket and clothing company benefits are: standardisation of the system; system speed, efficiency and consistency; reduction of loss of documents; and easy to identify anyone that has passed through the organisation for decision making purposes
IQ2.2.8	**76.** Policies are in place when using and making amendments to the system
IQ2.2.9	**77.** Both companies are satisfied with the HRIS system **78.** Poor customisation of the system, its complexity, lack of experience by users, and not having all the modules on SAP, are the reasons for non-satisfaction
IQ2.2.10	**79:** Future expectations of the participants in the oil and petroleum company: automation and integration; expand all the loose HR processes into one portal; the completion of the talent management module and recruitment module; advance in such a way that people could work from home; getting the people who are open to learning the system; simplification and consolidation; and documents need to be scanned and saved into the system. **80:** Future expectations of the participants in the supermarket and clothing company: look at the HR strategy to see what can be centralised and what can be on shed services; need management support on the improvement of the system; utilising the system better and adding other packages which are not in use; make it more electronic, efficient, and eliminate paper work—everything should be systemised; and the system need to keeps up with the latest technology advancement.

4.6   THEMES DEVELOPED AND SUMMARY

This chapter analysed the data collected from the interviews by establishing the participants' views, opinions, and experiences with regard to the use of their HRIS at their various retail organisations. It also portrays the difference, similarities, and modules that are used by both retail organisations, and the reasons for such usage on the HRIS. The data was processed and analysed in a way that the researcher was able to answer the research questions. The data was collected through interviews from the employees of different levels in the HR and IT departments of two retail outlets in Western Cape. The interview schedule contained the same

questions for all the participants and the results were illustrated using bar charts and tables.

Some of the important findings are itemised below:

i) Table 4.2 gives an indication that both companies have not yet optimised the use of *SAP HR*, although the oil and petroleum company makes use of the system much more than the supermarket and clothing company.

ii) Figure 4.1 shows that the majority of the participants indicated there is no standardised HRIS specifically for the retail sector, even though they did indicate that most organisations make use of *SAP HR* as a system of choice.

iii) Figure 4.3 shows that majority of the participants indicated that not all the employees have access to *SAP HR* because of not using the ESS module effectively.

iv) Figure 4.4 indicates the participant perception as average that the size of the organisation affects the effective use of HRIS.

v) Figure 4.9 shows that the majority of the participants are in agreement of the fact that their company does conduct upgrades on the system, but that the system is not regarded as critical for the business because it does not have any financial contribution to the business.

vi) Figure 4.11 indicates that the use of the HRIS is more of administrative than strategic task.

vii) Figure 4.14 and 4.17 indicate that there is a high rate of HR practices and satisfaction within the two companies respectively, but there is a need to simplify the system through modification.

viii) Table 4.7 below shows the theme development and how it was realised. From the summary of the findings from both companies (Tables 4.3 to 4.6), the researcher combined the major findings from the interview questions based on eight (8) head findings in order to base the discussion according to the research questions and sub-research questions in chapter Five.

1	**The implementation and use of HRIS system**	
	IQ1.1.1	System used for (SRQ1.1) RQ1.
	IQ1.1.2	Standard system for the retail for (SRQ1.1) RQ1
	IQ1.1.7	Critical factors (intricate process) for (SRQ1.1) RQ1
	IQ1.1.8	Size of the organisation for (SRQ1.1) RQ1
	IQ1.2.3	Capturing, recording and retrieval for (SRQ1.2) RQ1
	IQ2.1.1	Modules of HRIS system for (SRQ2.1) RQ2
	IQ2.1.3	Use all the modules for (SRQ2.1) RQ2
	IQ2.1.3	Modules suit the business (SRQ2.1) RQ2
2	**Training**	
	IQ1.1.5	Training to users (SRQ1.1) RQ1
	IQ1.2.1	Strategies (training) for (SRQ1.1) RQ1
	IQ2.1.1	Learning module (modules) for (SRQ2.1) RQ2
3	**Policies**	
	IQ1.1.3	Employee details for (SRQ1.1) RQ1
	IQ1.1.4	Access to SAP for (SRQ1.1) RQ1
	IQ2.1.4	Upgrades for (SRQ2.1) RQ2
	IQ1.2.2	Incentives for (SRQ1.2) RQ1
	IQ2.2.8	Policies in place for (SRQ2.2) RQ2
4	**Security**	
	IQ1.1.6	Information security for (SRQ1.1) RQ1
	IQ1.2.4	Confidentiality, Privacy and security for (SRQ1.2) RQ1
5	**Principles**	
	IQ1.1.7	Critical factors (team work) for (SRQ1.1) RQ1
	IQ1.1.7	Critical factors (project team) for (SRQ1.1) RQ1
	IQ1.1.9	Team work & staff participation for (SRQ1.1) RQ1
6	**Strategies**	
	IQ1.1.7	Critical factors (business plan & vision) for (SRQ1.1) RQ1
	IQ1.2.1	Strategies (recruitment) for (SRQ1.2) RQ1
	IQ1.2.1	Strategies (development) for (SRQ1.2) RQ1
	IQ1.2.1	Strategies (reward) for (SRQ1.2) RQ1
	IQ1.2.1	Strategies (talent management) for (SRQ1.2) RQ1
	IQ1.2.1	Performance management strategies (SRQ1.2) RQ1
	IQ2.2.1	Administrative task for (SRQ 2.2) RQ2
7	**Profitability**	
	IQ2.1.5	Contribution to continuity & profitability for (SRQ2.2) RQ2
	IQ2.2.6	Efficiency & effectiveness for (SRQ2.2) RQ2
	IQ2.2.7	Benefits for (SRQ2.2) RQ2
8	**Management decision making**	
	IQ1.1.7	Critical factors (top management support) for (SRQ1.1) RQ1
	IQ1.1.7	Critical factors (change management) for (SRQ 1.1) RQ1
	IQ1.1.10	Management confidence and trust for (SRQ 2.2) RQ2
	IQ2.2.2	Represented in managerial level for (SRQ2.2) RQ2
	IQ2.2.3	Management satisfied for (SRQ2.2) RQ2
	IQ2.2.4	Staff satisfied for (SRQ2.2) RQ2
	IQ2.2.9	Satisfied with the system for (SRQ2.2) RQ2

The next chapter will be discussing the research results using a thematic method of analysis, which are itemised in Table 4.7. The themes are: implementation and use of HRIS; training; policies; security; principles; strategies; profitability; and management decision making.

CHAPTER FIVE: DISCUSSION

5.1 INTRODUCTION

As shown in Chapter One, organisations find it difficult to implement and maintain HRISs and as a result, organisations cannot effectively utilise the system to their benefit. The two retail organisations used as unit of analysis illustrate that the implementation and use of HRISs are indeed difficult. The research shows several factors affecting the implementation and use of HRISs. These factors are to a large extent similar to what has been reported in literature.

Factors such as organisational attention, the complexity of the HRM to technological responses, success of change management to support system user acceptance, and system add-ons by different vendors create challenges for system integration. The upkeep of correct data such as the information of staff that resigned and who are no longer with the organisation, remains problematic. Duplication of HR files complicates employee management. A further factor that contributes to the underutilisation of the HRIS is the time that lapses before the system is updated, affecting the use of data in the decision making process.

Chapter Five presents the interpretation and discusses the information that was obtained from the transcribed interviews conducted in the two retail companies in order to clarify the research problems. The discussion of the results has been organised according to the research objectives and the conclusions were drawn from the data analysis.

The next section presents the themes that have been developed from the findings. The following themes are discussed next:

- HRIS implementation and use (RQ1; SRQ1.1 & 1.2; RQ2; SRQ2.1)
- Effective training (RQ1; SRQ1.1; RQ2; SRQ2.1)
- Policies in place for effective HRIS (RQ1; SRQ1.1 & 1.2; RQ2; SRQ2.1 & 2.2)
- Effective security (RQ1; SRQ1.1 & 1.2)
- Principles adopted (RQ1; SRQ1.1)
- Strategies (RQ1; SRQ1.1 & 1.2; RQ2; SRQ1.2 & 2.2)
- Profitability (RQ2; SRQ2.2)
- Management decision making (RQ1; SRQ1.1; RQ2; SRQ2.2)

5.1.1 HRIS implementation and use

Emanating from the interviews conducted in the retail outlets, it is evident that both retail companies use *SAP HR* as an HRIS; however, both companies also use other HRISs to support the *SAP HR system*. The oil and petroleum company indicated that they use Neptune and Nakisa with *SAP HR* and are still using the old HRIS in one of their stores. The supermarket and clothing company uses Kronos in addition to *SAP HR*. The companies do not make full use of their preferred HRIS and one of the main factors for doing so is the cost of the modules for the SAP system. This research supports the study conducted by Khoualdi and Basahel (2014:2) who found that the SAP system is usually acquired by big companies and they only purchase the modules they can afford.

The size of the organisation has an impact on the effective use of the HRIS. Figure 4.4 shows that 57% of the participants in both companies indicated that the size of an organisation does influence the effective implementation and use of an HRIS for reasons such as the cost of implementation and maintenance involved, the coordination of the system, and the technological base of the organisation. There is also the group that stated it is not the size of the company but rather the data accuracy and consistent use of the system that matter. This research is in contrast with the findings reported by Kapoor and Goyal (2014), Mohite (2012) and Ngai and Wat (2006) who found that size of an organisation does not matter in the effective use of the system. Although the research indicates a contrasting view it needs to be noted that only half of the participants are of the opinion that size is a factor.

Interviewees were asked what HRIS and modules have been implemented and are used by their organisations. From the answers it can be concluded that both organisations implemented and use hybrid systems with *SAP HR* being the major system. The oil and petroleum company uses ten (10) SAP modules and three (3) other systems. The supermarket and clothing company uses five (5) SAP modules and four (4) modules from another system. Some of the 'outside' modules that have been identified by the participants as important for the business are modules such as performance management, talent management, recruitment systems, and ESS.

It seems that from the findings, the two companies are not fully utilising their implemented HRIS. With the two companies functioning in a competitive environment, cost is always a factor to be taken into consideration. The companies need to balance what is needed against what is affordable and then optimise the system accordingly. However, as discussed earlier, optimising the HRIS is a

complex process with many factors affecting the processes. The research of Chugh (2014:149) shows that "HRISs are being underutilised". Methuku and Ramadan's (2013:499) indication of the existence of the need to add new useful modules to the HRIS, supports the findings of this research.

It is suggested by participants that a standardised HRIS for the retail sector is needed, but the participants are unsure of how this may affect their competitive advantage. It can be argued that an HRIS is common business practice and cannot create a competitive advantage. The use of an HRIS may however create a competitive advantage. Not having a standardised system for retail may be a problem that needs to be considered because a standardised HRIS may create a unionised way to conducting the HR processes in the retail industry irrespective of the size of the organisation and may reduce cost to the industry making HRIS affordable, and by doing so benefit the employees. This research supports the findings of Riley, Zuber, Vindigni, Gupta, Verani, Sunderland, Friedman *et al.* (2012:8) who state that "there is a gap regarding the HRIS processes capable of generating the required information, and there is dearth in the available information on HRIS implementation due to lack of standardised systems in place".

A participant from the oil and petroleum company mentioned that the turnover of key staff has been identified as one of the major reasons that organisations are not effectively implementing an HRIS, which is caused by the non-documentation of intricate processes that should be followed in the use of the system. This research supports the study conducted by Troshani *et al.* (2011:474) who found that the intricate nature of the HRIS will be better understood when companies are able to interpret who the relevant organisational actors are and their effect on the business.

From the interviews, questions were asked to determine which of the modules on SAP are regularly used for the business. All participants from both companies indicated that they make use of all the modules they could afford from SAP as well as modules of other systems, which signifies that all the modules are very important for the business for effective use of the system. Companies need to look into bringing all the modules into one HRIS. This research corresponds with the study conducted by Jahan (2014) who found that some organisations might want more modules in their preferred HRIS, but this will be determined by the expenditure and future plans of the organisation, otherwise the system will create complexity in usage and performance.

From the interviews, questions were asked to determine if the modules used suit the business. In Figure 4.8, 95% of the participants in both companies gave a positive indication that the active modules do suit the business albeit not as fully as expected. There is a need for the modification and inclusion of other modules from other systems into SAP to make the system more effective. This research corresponds with the study conducted by Thite, Budhwar and Wilkinson (2014:4) who state the need to have an HRIS structure that is suitable for the business.

From the interviews, where questions were asked relating to the capturing, recording, and retrieval of data on the HRIS, the participants indicated that the capturing of quality data is a problem because of the large amount of data captured at a particular time as well as the competence and experience of the data capturers. It is recognised that the non-compliance and timelessness of personal data is an issue because some employees are not able to provide updates of their personal details to the HR department. A participant from the oil and petroleum company indicated that updating the HRIS is not automatic and this affects the accuracy of the report generation.

5.1.2 Effect of training on HRIS implementation and use

Emanating from the interviews, all the participants in both companies indicated that training is a prerequisite to gaining access to the HRIS. Before an employee is allowed to use the system, a competency certificate is issued. Despite the training and verification of competency, participants stated that the capturing of data is below standard. The training is conducted in-house and it may be that the training is below par and/or controls are lacking during the capturing of data.

Training is part of the strategy before and during implementation, yet the data quality is still an issue. This finding resonates with the work reported by Chitere and Gachunga (2013). It is also recognised that the mind-set of some of the users in terms of understanding how the system works is an issue and needs to be addressed during training in order to contribute to the effective use of the HRIS.

5.1.3 Policies in place for effective HRIS utilisation

Many of the participants (76%) indicated that they capture what is relevant information to manage an employee. This implies that 24% of the participants are of the opinion that non-relevant information is captured, or no data are captured at all. For example, information of contract workers is not loaded on the HRIS. Both companies are aware of the importance of capturing the details of all the employees

on the HRIS, especially for legislative compliance. According to Chugh (2014), staff information required to be captured on the HRIS includes the name, date of birth, gender, address, staff number, position title, position location, salary, reporting lines, and other company specific information. Based on this research, the companies are not implementing this policy, which affects the effective implementation of the HRIS in the retail industry.

Not all employees have access to the HRIS. Access depends on the policies of the company. In both cases employees can only gain access once they have been trained and are certified to use the system. Furthermore, if an employee's details are not on the HRIS, no access will be granted. The access or lack of access of employees to the HRIS has a profound effect on the effective use of the HRIS. This reasearch coresponds with the study conducted by Wiblen, Grant and Dery (2010) who state that the transformation of the HRIS needs to include the access of all the employees and that access of employees to the system is be very critical for the effective use of the system.

There needs to be policies in place for the upgrading of the HRIS. Participants from the oil and petroleum company indicated that they do have policies in place when upgrading. Upgrades are done as and when they are released by the vendor. However, these upgrades are done based on compatibility with the systems and strategies of the business, and cost in taken into account. In some cases, tax laws force the oil and petroleum company to upgrade in order to be compliant to the laws. This research corresponds with the study conducted by Dery, Grant and Wiblen (2007) and Arora (2013) who found that cost, competence, and lack of continuous upgrades on the system are part of the major problems that affect the role HRISs play in the retail sector.

Participants agreed that an incentive to use the HRIS is not a good idea. The general approach to incentives is that using the system is part of their work and employees should not be incentivised. Contrary to the findings in the research, Black (2015) argues that the need exists to increase incentives for the employees, with the asumption that it will result in an increase in their efficiency and job satifaction.

Although 90% of the participants indicated that they do have policies and procedures in place when using the system, for example to make amendments, deletions, and additions, the procedures have been found not to be well

documented, and this has been given as a reason for not utilising the system in order to achieve the benefits. Boateng (2007) as well as Mohammed (2015) report that some businesses do not have HR policies and practices in place to operate the system and use word of mouth to guide users through the system, resulting in ineffective use of the HRIS.

5.1.4 Information security and effective HRIS use

Zafar (2013) states that human error, whether deliberate or not, results in security breaches in the HRIS. Security is seen by both companies as important and is the first step to a trust relationship between the user and the system. There are security processes in place to safeguard the systems. The security ranges from individual log-in and passwords to authorisation procedures in place to control access. However, human error and the lack of effective training of the users are still distorting the effective security of the system. The oil and petroleum company includes in their security strategies business recovery procedures in case of any disaster, and will have the system up and running within 72 hours of a disaster.

Confidentiality, privacy, and security of the system are important to all the participants and they indicated that users sign a confidentiality agreement before receiving a username and password. Access to the system is role based, meaning that the level of access is based on the user's role and function. But some people are given access more than what is needed to do their work and this is a negative factor that affects the effective implementation and use of the system. Also, when someone is transferred from the HR department to another department and the change is not effected immediately on the system, that person will have access to the HRIS for some period of time, which is a threat to the security of the system. This is one of the reasons why security of the HRIS contributes to the ineffective use of the system. This research corresponds with the study conducted by Arora (2013) which states that information security is a challenge and that there is a need to priortise the information of employees so as to achieve a high standard HRIS.

5.1.5 Adopted principles in HRIS implementation and use

From the research two basic principles have been identified when implementing and using an HRIS. These two principles are i) the use of team work, and ii) the management of business processes.

Boateng (2007) as well as Akpaloo (2010) argue that team work is an important principle when implementing an HRIS. The findings of this study concur with the

authors, and in both organisations participants responded that the success of their implementation is contributed to team work within the implementation process.

Laumer, Maier and Eckhardt (2014) and Arini and Bangun (2014) state the need for improved business process management in place for effective and efficient HR process in the use of an HRIS. For the implementation to be effectively utilised, management needs to continuously improve the processes and manage it actively. Both organisations are of the opinion that they lack this ability and strategy, resulting in the ineffective use of the HRIS.

5.1.6 Adopted strategies in HRIS use in retail

The following strategies are important to the organisations: recruitment; talent management; reward management; organisational development; administration; and the alignment to the business vision and plan.

i) Recruitment

The participants agreed that they were able to achieve their recruitment strategic goal through the coordination of HR processes into a systematic and automated form. However, the achievement is overshadowed by the fact that recruitment is done on a different system to the main HRIS and this is a problem that needs to be researched. Not having the recruitment done on the main HRIS has a negative impact on the strategies expected to support the effective use of the system. This research corresponds with the study conducted by Marufu (2014) on the need to conduct recruitment using the HRIS in order to improve in the efficiency of recruitment, high quality hiring decisions, and cost savings in the long run. Mukherjee, Bhattacharyya and Bera (2014) as well as Marufu (2014) state the need to have an applicant tracking system (ATS) in the HRM system for an effective recruitment process.

ii) Talent management

From the interviews, the participants identified talent management as a strategy that have been achieved. The company aligned itself to the future aspirations and achievements of their employees. The fact that such a strategy may not be justified because of the talent management process not been implemented on the HRIS, affects the strategic task of effective HRIS implementation. This research corresponds with the study conducted by Ghosh *et al.* (2014) who found that companies not implementing the talent management system are faced with the challenges of frantically scrambling to fill vital positions across the organisation

structure, and this is a determinant factor that affects the effective use of the system for organisational benefit.

iii) Reward strategies

From the interviews, most of the participants gave a positive response that a reward strategy has been put in place during their HRIS implementation. The payroll systems work well and it is easy to retrieve the salary of any employee and also have an idea of what everyone is worth to the organisation. Long term service awards are a very important award which falls under the reward strategy and has been put in place with the HRIS and the system supporting the strategy. Poor quality of data has a negative effect on the report of such cases, causing unhappiness with employees. The need for a reward strategy that is reliable and correct has been expressed by participants. This finding supports the study conducted by Wood and Brathwaite (2013) who state that there is a need to create an employee assistance programme and reward programme to motivate the workers and also attract skilled talents for the effective use of the system.

iv) Organisational development

Thite, Budhwar and Wilkinson (2014) state that the HR roles in an organisation need to be aligned to the development strategy for effective talent capital resources. Participants of the two organisations are of the opinion that a positive outcome of the implementation of the HRIS is that development strategies are now part of the HRIS and have transformed the HR system.

v) Administration

Ball (2001) indicates that the HRIS is used as administrative and not as strategic tool. Fifteen (15) years later, participants still see the HRIS as a main administrative technology to support the HR processes in an organisation. They do not see *SAP HR* as a critical system for the retail business because it does not contribute directly to any form of revenue. This underestimation of the importance of an HRIS in the organisations is one factor why management does not invest time into the system. However, participants are convinced that the situation and perception are changing with the implementation of the *SAP HR*.

vi) Vision and business plan

The implementation of any technology should be aligned with the business vision. Furthermore, the new technology needs to support the business plan and the processes. Participants of both companies stated that they have achieved HRIS

alignment with the vision and business plan. They see this as a critical factor in the implementation of the HRIS. Yadav and Dabhade (2014) state that the planning process should be in line with the business strategy for sustainability purposes, which is vital for an effective business plan and objectives.

vii) Performance management

Nthambi (2014) mentions that performance management is an important aspect of an organisation's efficiency as a way of linking the rewards to employees' performance. It is expected to be one of the achievements in HRIS implementation, but for the fact that both companies do not conduct performance management on *SAP HR* has a negative impact on the achievement of such a strategy.

5.1.7 The effect of HRIS on the profitability of the organisation

The participants indicate that the implementation of the HRIS indirectly contributes to the sustainability, continuity, and profitability of the organisations, provided the data is accurate. Muriithi, Gachunga and Mburugu (2014:49) state that the use of an HRIS might not contribute financially to the profitability of the business, but if it is properly utilised, it would be able to assist in the transformation of the way the business is conducted and also improve the efficiency of the organisations. From the interviews, most of the participants reported that there are benefits to be derived from the implementation of the HRIS. Automated business processes are seen as one of the major benefits of the HRIS. Unfortunately, issues such as poor data quality, not fully utilising all the modules of the system, poor customisation, and poor standardisation of the system are the problems that have been identified as reasons why the companies could not be able to measure the benefits that come with the system. This research corresponds with the study conducted by David, Shukla and Gupta (2015) who state the need for organisations to look at the proper utilisation of the new technology by knowing the challenges and interrupting issues that deprive them from achieving the benefits of the system.

One of the most important issues facing managers and researchers is how to measure the impact of HRIS on the profitability of an organisation. This seems to be a distressing problem and further research is needed to solve the problem (Mbugua, 015; Kariuki, 2015; Pivac, Tadić & Marasović, 2014). Pivac, Tadić and Marasović (2014:292) reported that the measurement of the profitability and performance of HRISs are complex and difficult. The authors recommend that more research needs to be done on this topic. Kariuki (2015:204) argues that the HRIS has an influence on profitability but does not have enough data to prove it. Mbugua (2015:100) is of

the opinion that little attention is paid to organisations with regard to HRIS contribution on their performance, productivity, quality, and profitability.

5.1.8 Effect of an HRIS on the management decision making processes

All the participants indicated that they do have top management support in the implementation of the HRIS. Management internally adopts and improves the skills of the users through training, and through this they show top management support. Older employees in management seem to distrust the new system. One participant mentioned that some members of management most of the times sign documents manually and by doing so they compromise the integrity of the system. This behaviour is a factor that affects the effective use of the system for management decision making. Dery, Grant and Wiblen (2007) argue that key managers and employees who do not fully accept the HRIS, contribute to the reasons affecting the effective use of the system for management decision making processes.

From the interviews conducted, most of the participants indicated that change management was the most critical factor that the companies went through in HRIS implementation. Periysamy and Amsa (2014) state that the success of a change management process in the use of an HRIS requires the support and acceptance of management. In both organisations, the HRIS is presented by senior managers of HR and IT.

Fifty-two percent (52%) of the participants responded that the staff members are satisfied with the HRIS in place as long as they get their correct salaries. Forty-eight percent (48%) are of the opinion that staff is more or less satisfied with the HRIS. The reason given for this 'less than satisfied' answer is the lack of effective use of the ESS module by the employees in the oil and petroleum company. The ESS is a module in the HRIS that is expected to be used by all the employees as a way of empowering them to capture their own information on the system. It indicates that some of the employees struggle with using the system because of the lack of effective training and frequent use of the system, affecting the level of satisfaction with the system. The supermarket and clothing employees do not make use of the ESS modules and are ignorant of the advantages they are missing out on by not knowing how the system functions. In this research, most of the complaints relating to the issue of not making use of the ESS modules came from the managers and indicates that there is a possible correlation between the position of an employee in the organisation and satisfaction of employees with the HRIS. Bal, Bozkurt and Ertemsir (2012) state that the HRIS satisfaction of employees will be determined by

the position of the employee because the higher the position, the higher the regard for the system, and this in turn affects the level of satisfaction of the employees with the system.

Management satisfaction with the system is divided. Some of the managers are of the opinion that the system assists them and that their job depends on it for quality decision making. Other managers are of the opinion that the data quality is problematic as some employees still make use of manual processes. They are also of the opinion that the report generation is not on the required standard. Kumar and Parumasur (2013) state that an effective HRIS is aimed at making the HR processes more efficient and faster to cultivate managerial satisfaction, but if not properly implemented and utilised, the system will not deliver the required management satisfaction. It seems that the two organisations are experiencing implementation and utilisation challenges and as a result, a lower level that expected satisfaction with the HRIS is experienced.

Participants (67%) rated management confidence and trust in the HRIS as high. The argument is that if management invested such large amounts of capital in the system, they must have confidence and trust in the system. This is a misguided argument or opinion as confidence and trust is earned by the materialisation of the benefits of the system. The benefits are in turn dependent on the customisation, functionality, and quality of data captured and extracted from the HRIS.

In general, participants (86%) are satisfied with the HRIS, especially when comparing it with the old systems. As indicated earlier, customisation and standardisation is important to the participants. The HRIS needs to be less complex and more training is needed to improve and even better satisfaction rating.

5.2   SIGNIFICANCE OF THE STUDY

This study contributes towards a better understanding of the complexity of the HRIS ecosystem. This was done by exploring two organisations using a complex HRIS (HRIS SAP). The two main factors addressed were the **implementation** and **utilisation** of the system.

Implementation depended on several factors some, being the ability of the organisation to align the HRIS with the business and IT strategies, management and employee involvement, teamwork, and the cost relationship between modules and the promised benefits. The utilisation of the system is dependent on the training of

all employees, access to the system by employees (security), the capturing of data, the extraction of the data, and quality reports.

RQ1: What are the reasons for organisations not implementing Human Resource Information Systems (HRISs) effectively?

SRQ1.1: What factors affect effective HRIS implementation in the retail sector?

The factors have been identified as:
- Make use of other systems together with *SAP HR*
- No standard HRIS for the retail sector
- Non-documentation of intricate processes
- Size of organisation affects the effective use of the HRIS
- Lack of effective training
- Low level of employee access to the system
- Lack of effective information security
- Low level of management support to the system
- Lack of effective training to users

SRQ1.2: What strategies have organisations achieved in HRIS implementation?

Strategies achieved include the following:
- Recruitment, but not conducted on the system
- Talent management, but not on the system
- Reward, but no incentives
- Organisational development
- Administration
- Vision and business plan
- Performance management, but not on the system

RQ2: How do organisations utilise HRISs in order to achieve the benefit thereof in the retail sector?

SRQ 2.1: What are the HRIS modules the retail sector uses to have an effective system in place?

Modules identified are:

- Using of all the modules on SAP but there is a need for inclusion of other modules suitable for the business
- Staff and management support to the system
- Have analytics but the degree of usage is a concern
- Need for modification of the modules on the system for simplification
- Need for regular upgrades of the system

SRQ2.2: How do organisations use HRISs in their decision making processes?

- HRISs are used as follows in decision making processes:
- The system is still more of an administrative and less of a strategic task
- The systems' contribution to the profitability of organisations
- Inconsistencies and error affect the satisfaction of the system
- Not making use of the ESS module to empower the employees to capture information on the system

5.3   SUMMARY

Chapter Five addressed the implementation and use of the HRIS, effective training, policies in place for effective HRIS, effective security, principles adopted, strategies, profitability, and management decision making. The themes were developed against the background of the research questions.

These themes are:

i)   **Implementation and use of the HRIS:** The theme investigated the HRIS that both companies uses, the modules, intricate processes, and human error and its impact on recording and retrieval of data.

ii) **Training:** The theme focused on the effect of training on the use of the HRIS, training as a strategy to achieve, and how it generally impacts on the organisation.

iii) **Policies in place for an effective HRIS:** Policies in place for the HRIS has been the main focus of the theme and included the capturing of all employee details on the system, employee access to the system, system upgrades, incentives, and policies in place to safeguard the system.

iv) **Effective security:** This theme examined the information security in place and how secure the confidentiality of the system is.

v) **Principles adopted:** This theme focused on the impact of team work and staff participation in the implementation process.

vi) **Strategies:** This theme focused on the strategies to be achieved, such as the recruitment, reward, business plan and vision, talent, and administrative and performance management.

vii) **Profitability:** This theme investigated the system effectiveness, its contribution to the profits, and benefit to the organisation.

viii) **Management decision making:** Top management support, change management processes, management trust on the system, and the satisfaction of the staff and management towards the use of the system were investigated under this theme.

The next and final chapter will be the conclusion to the research by highlighting a brief summary of all the chapters and proposing a guideline as recommendation on how the retail sectors could be implementing an HRIS in order to measure the benefits gained from using the system.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1   INTRODUCTION

The aim of this research is to explore how HRISs can be implemented and utilised in order for organisations to gain the expected benefits of the system. A further aim is to propose guidelines for the implementation and use of an HRIS in the retail sector. Two retail organisations have been identified as case studies. The reasons why organisations are not effectively implementing HRISs were identified through the use of the research questions. This research looked at the how organisations use the system to assist management in making decisions that could impact on the business, by investigating the modules of preferred HRIS in the organisations and determining which of the modules are in demand or needed for effective decision making. Critical modules needed to implement a strategic HRIS, have been identified.

In achieving the research aim, interviews were conducted with purposively chosen participants in the HR and IT departments of both retail outlets. As listed in Table 4.1, the participants included the HOD, managers and administrators for face-to-face conversations and a clear view on how the system impacts on their work and that of the company.

Chapter One dealt with the introduction, background of the research problem, research problem statement, research questions, aim, research design and methodology, delineation, and the significance of the research.

Chapter Two is a literature review using keywords derived from the title, problem statement, research questions and aim of study.

Chapter Three focused on the manner in which the data was collected in order to answer the research questions. The chapter focused on a qualitative method that was used to conduct the research, the research philosophy, research approach, research strategy that was used, the method of data collection, data analysis, and the ethical considerations. Interviews were conducted and a multiple case study was used to analyse the data. Samples of 21 participants were purposively selected from both retail companies to be interviewed.

Chapter Four dealt with the analysis of data which was collected through interviews conducted in both case studies. The data collected through an interview was

analysed through a qualitative method. An Excel spreadsheet was used to analyse the data, using tables and bar charts to illustrate the responses to the different questions and statements made by the participants. Content analysis which was focused on the keywords from the transcribed interviews was also used to analyse the data.

Chapter Five dealt with the data interpretation of the results in Chapter Four. It is regarded as the main aspect of the research as it answered research problem that was identified in at the beginning of this research (Chapter One). The analysis of this chapter focused on the fact that HRIS is not fully utilised; there is no gap in the system, but there is a gap in the utilisation and complexity of the system, which form part of the major factors that deprive companies from gaining the expected benefit of the system.

6.2   RECOMMENDATIONS

The recommendations in this research is in the form of a guideline for retail industries to consider in order to have an effective and efficient HRIS and gain the benefits expected from using the system.

6.2.1   HRIS modules to be integrated into one portal

There is a need to look at the modules identified by both case studies to have an effective HRIS in place in the retail sector for organisations to achieve the set objective, namely the benefit of using the system. Many companies may not be aware of the modules they are required to have in their preferred HRIS and therefore request a system that is imposed on them without having an idea of what is needed for them to benefit from such a system. This research makes suggestions that should be integrated and combined into the preferred HRIS of a retail business irrespective of the kind of business it operates for the following modules:

i)   **Payroll:** It is a module used for capturing the sum of all financial records of employee salaries in form of wages, bonuses, benefits, and deductions accrued to them. In accounting, *payroll module* refers to the system into which the amount paid to employees for services they provided during a certain period of time, are captured. The payroll module is one of the most important reasons why companies such as the retail outlets with massive number of employees need the HRIS system in order to automate their payroll processes. The benefits administration module is used to record and monitor any form of benefits accrued to an employee, similar to the supermarket and clothing company were it was mentioned that long service

award is one of the most important benefits that is given to the employees. We suggest that the benefit administration module should be added as part of the payroll module for simplification of the system because it forms part of payments made to employees and should not be regarded as a separate module. This is part of the ways that the HRIS system could be simplified, effective and beneficial to the retail companies.

ii) **Time management**: This module used to record the process of planning and exercising conscious control over the amount of time spent on specific activities by employees to increase the effectiveness, efficiency, or productivity of their work performance. Some companies have systems such as Kronos which is a form of time-tracking software to perform the duties of the time management module, but for effective use and benefit of the preferred HRIS, there is a need for companies as big as the two case studies to make use of the time management module on SAP so that it could be consolidated into other modules and systems for consistency and simplification purposes. The absence management module deals with control over the lateness and absenteeism of employees at work. There is a need to include the absence management module to be part of the time management module because both deals with the time employees performs their work and focus on the performance appraisals to determine who perform their work as required for the effective use and simplification of the system and for the benefit of the business.

iii) **HR (MIS)**: This is a module that deals with people, technology, organisation, and their relationship with the HR department. It refers to how individual employees or groups implement, manage, and utilise the HRIS in order to generate HR information that will help in the decision making of the organisation. Such information might be technological or in any format as requested by top management to make a decision that would impact on the company. This is an important module that needs to be part of the HRIS for strategic decision making processes.

iv) **Recruitment system:** It is a module in the HRIS used to conduct recruitment. Data is captured directly into the system to avoid duplicate capturing. Most organisations are not making use of such a module; they either use a separate system for recruitment or they do it manually, which deprives the effective use of the system. There is a need to conduct recruitment if possible on-line, directly into the system for effectiveness of the HRIS.

v) **Learning system**: It is a module used in the administration, documentation, tracking, reporting, and delivery of electronic educational technology that relates to training programmes and other educational courses attended by employees.

vi) **Performance record**: It is the process of collecting, analysing, and reporting information regarding the performance of an individual employee. It involves performance appraisal which deals with studying the processes and strategies followed to see whether the output of employees are in line with what was intended or should have been achieved in their work performance.

vii) **Employee self-service (ESS):** It is a module on the HRIS that provides employees with access to their personnel records and payroll details. It includes allowing employees to change their own contact details, family member information, banking information, and benefits. It also allows the employees to capture some administrative data such as leave application, review of timesheet, loan application, overtime, etc. The ESS module assists companies to transact HR duties without an office because such a transaction could be operated through an intranet or website service.

viii) **Scheduling:** It is a form of time table used as a time-management tool that consist of time slots in which certain tasks such as work rosters and time sheets need to take place, used to apportion who and when employees need to come to work. It is an important module for the retail industry because of their large number of employees.

ix) **Analytics:** It is a form of meaningful communication of data in the system. It relies on the simultaneous application of statistics, computer programs, and operations to quantify a particular performance. The analytics module is an important tool for strategic performance and based on this research, it was mentioned that in both companies, this module is not fully utilised which is an issue that needs to be critically focused upon for effective strategic decision making by management.

x) **Talent management:** It refers to human capital and how it helps to improve the performance of organisations. In the research, talent management has been described as one of the most important and vital modules that need to be included on the preferred HRIS for strategic task purposes. The talent management module is used to maintain the skilled talents in an organisation. Everything that has to do with recruiting, retaining, developing and making people to perform their duties diligently fall under

talent management. The retail industry with its high number of employees needs to have such a module added to their preferred HRIS for effective use and also be able to monitor their skilled employees. In this research, it is believed that any organisation with a talent management module on the HRIS system will be able to solving problems that relate to CCMA matters, employee equity administration and fingerprint check for criminal records, discipline, and grievance. We suggest that there is no need having separate modules for each of the above mentioned functions for simplification purposes.

xi) **Management self-service (MSS):** Any company that has an ESS module where the employees are required to work on the system will also have the MSS module to allow the manager access into the information that was captured by the employee in the ESS, to verify the validity of the captured data, be able to sign and make further approvals on the system. An ESS a module would be important in the retail sector in order to eliminate manual interventions and issues such as face-to-face confrontation between manager and employee. Everything will be done electronically on the system, and that is what most retail industries would expect for effective use of the system.

For retail companies to be able to measure the benefits from the use of an HRIS, they need to look into having all the mentioned modules on their preferred HRIS in order to be reasonably certain of achieving the benefit of the system. The integration of processes is critical in this research and the need to combine modules such as hiring right through to printing the appointment letter to be one function on the system, will assist in gaining the benefits of the system.

6.2.2 Cost impact on the effectiveness of the system

Cost has been one of the biggest issues that hinders the effective implementation and maintenance of the HRIS in organisations. The system can be implemented by any organisation irrespective of size, but in terms of the benefits, the company that is able to afford all the modules on the preferred HRIS will be more fortunate to benefit from the system and that refers to the bigger companies. They are willing and able to afford the resources to implement a HRIS with all the modules included. In this research, it was discovered that the oil and petroleum company makes more use of its HRIS than the supermarket and clothing company even though both are regarded as big retailers. Yet, neither could measure the benefits of the system because both still do not have all the required modules on the preferred HRIS, with

special reference to the talent management module. It is believed that the high cost of the SAP system determines the modules these organisations can afford.

Having a standardised HRIS for specific industries would be a good idea, but in terms of size of the organisations and the cost that will be involved, it might disadvantage the smaller organisations which might not be able to afford such a system. This will then still remain a challenge to the industry. For a retail company to be able to measure the benefits of the system the company must be able to afford the HRIS and the modules expected for effective use of the system.

6.2.3   Need to regard HRIS as critical system for the business

HRISs are not regarded as critical for the business because it does not directly contribute financially in terms of profit; rather, it contributes to the continuity and sustainability of the company. Companies believe that revenue is much more important than the management of their employees, and that contributes to the reasons why companies do not want to invest so much on an HRIS.

The oil and petroleum company has a business recovery procedure to follow in case of a disaster. The HRIS is one of the systems that will be uploaded within 72 hours of the disaster happening because if the employees are not paid at the right time, it could motivate an industrial action. Yet, the system is not regarded as critical for business. The bottom line is the benefits of the system, and if required and companies are not willing to view the HRIS they implemented as important and as the most critical for the business, the benefits will not be achieved.

The management decision on what the priorities for the business are for sustainability and growth should be considered because a company cannot run itself without the employees. If the system that is used to manage the employees is not considered as part of the most critical for the business, the profits of the business will be negatively affected.

Upgrades of the system form also part of the reasons why companies should regard the system as critical. It was realised that the supermarket and clothing company has never conducted, or had no upgrades for some years, which is a great challenge because the system is not viewed as the most critical for the business. Without regular upgrades, companies will not be able to gain the benefit in terms of improvements in the system. Companies need to focus on regular HRIS upgrades as part of the guidelines that will assist in benefitting from the system.

6.2.4 Need for consolidation of all the modules

Having all the modules in one system makes integration within the system and among various departments easier. Consolidation of all the modules on the HRIS makes the work of individuals in various departments in the HR division easier. People need to be linked via the system; when someone in a department captures information and assigns it to a person in another department, both should be able to view it and understand what needs to be done without manual intervention or having to make phone calls. For example, the recruitment module needs to be linked to the payroll module so that if someone is newly recruited, the payroll department will take over to capture the payroll information after the employee's personnel information has been captured into the recruitment module. This will contribute significantly towards having an effective and efficient HRIS in the retail sector.

6.2.5 Need for effective modification of HRIS

HRISs are complicated to use. The system needs to be simplified and made easier for use by all users without them having to put in too much effort. Employees who are not working on the system constantly should be able to use the ESS module periodically without encountering difficulties.

The system needs to be modified to identify any error on information such as incorrect identification (ID) numbers—in the supermarket and clothing company it was mentioned that the system accepts wrong ID numbers, which poses a challenge. The modification should include a procedure that monitors all data being captured so that rules can be implemented to prevent the data administrator to proceed to the next level should the data be incomplete (e.g. empty spaces where information should have been entered).

6.2.6 Need to employ people who are open to learning

Training is a prerequisite for gaining access to the system and is being adhered to by both companies, yet there are still complaints of data errors caused by data capturers. Employees are not interested in learning how the system works although they have to make use of the system. Companies need to thoroughly scrutinise prospective employees in the initial stage of recruiting by imposing a stricter examination to identify persons who are intelligent, able to learn how to use of the system, and willing to work. The researcher is aware that some people do not want to work or take their job seriously, thereby creating havoc and confusion and making mistakes in their working environment, which will ultimately affect the effective use

of the HRIS. Companies need to employ people who are ready and interested to learning how the system works.

In this research it was found that both companies conduct most of their trainings in-house, which might not give a complete indication of how the system works. Companies need to bring in external experts to train the workers on the latest developments in the system that the in-house specialists might not be knowledgeable enough on to convey to the employees. This will contribute towards having an effective system in place.

As part of this research study, the impact of special incentives on the effective use of the system has been examined. If the right people are employed and given incentives to motivate their competence, it will assist in increasing their performance, which will contribute to the benefit of the system.

6.2.7 Need for effective policies in place for the use of HRIS

Companies need to put certain policies in place for effective HRIS use to prevent employees from using the system for personal reasons or implementing whatever they think is applicable. Also, different departments will have different opinions on the importance of information. For example, information relating to employee details must by itemised by the company to be the most critical for the entire business in general to be captured onto the system for easy an centralised access.

Government policies are also important to consider for effective use the HRIS. The system deals with the salaries that go to the employees, and with the taxes and other government levies that go to the government. Payments made to the government must be accurate and consistent. These different types of money transactions form part of the objectives of implementing an effective system to avoid penalties and fines from the government.

Policies should be put in place and conveyed to the staff. For example, one important policy concerns compliance to deadlines and time limits within which documents have to be submitted to the HR department for capturing on the system for the preparation of salaries. Adhering to deadlines will help to eliminate employees and management in general doubting the accuracy and timeliness of system reports.

6.2.8 Need for proper documentation of intricate processes and procedures

There is a need for companies to consider issues relating to the turnover of key staff and how it impacts on the effective use of the system. Companies need to document the processes that staff undergo when using the system so that when employees resign or take absence without leave, new appointees will be able to follow the documented processes for continuation of business. Giving some people power to manipulate the system and the company will negatively affect the system, but with proper documentation of work processes, the company will be able to measure the benefits derived from of the system.

The procedures to follow in the use of the system need to be properly documented for the benefit of the organisation. It was mentioned that neither of the two case companies have documented procedures to follow in using, correcting, deleting and making changes on the system. Technological changes are also not properly documented. These procedures need to be documented so that every system user can reap the benefits of using the system effectively.

6.2.9 Need for effective security of the use of the system

Information security is regarded as one of the major determinants of the effectiveness and management trust of the HRIS. Without an effective information system, the management will have no confidence in the accuracy and efficiency of the system outputs. The system is therefore role based and requires an access code. Employees should only be granted access for the work they are required to do on the system. As part of effective system security, companies should immediately change the transfer or movement of an employee from the HR department to other departments on the system in order to avoid a situation whereby such an employee is able to access parts of the system they are no more allowed to do—this could be harmful to the organisation and individuals.

6.2.10 Ability to scan and save documents on the system

Manual interventions on actions such as filling of documents are part of the issues that negatively affect the efficiency of the HRIS because it does not give the opportunity to scan and save documents on the system. A rectification needs to be added to the HRIS in order to eliminate manual interventions and other problems such as loss of vital documentations and filling cabinets taking up office space. Scanning and saving documents should start at the recruitment module were the applicant will have to apply online, directly onto the system, with the ability to scan and save all the required documents on the system. By the time an applicant has been selected, all the documentation relating to the applicant will have been

consolidated into the system. All the newly appointed person has to do is to report for duty and start working immediately. This would be a great objective and achievement for the retail industry which has large numbers of employees to manage.

6.2.11 Need to be date driven for consistency purposes

There is a need to understand that the HRIS should be date driven so as to be up-to-date with the information that is captured on the system. In the quest to be competitive with the other retailers on the market, the information that is derived from the system must be accurate and recent. Such information will assist in tracking down the employees that are not doing their work timely, and contribute towards putting measures in place to ensure that employees—even in the use of the ESS module—capture their own data timely and accurately in order to improve the efficiency and effectiveness of the system.

6.2.12 Need to advance the system to the latest technology

One of the main benefits of the implementation of an HRIS is to make sure that the system is able to be comparative with the latest technology for continuity and sustainability purposes. Every growing organisation (such as the cases in the retail sector) needs to be ahead of their competitors, and that is a challenge. More sophisticated and updated technological advances will be a way forward in terms of easy management of employees. Such technological advances will contribute significantly towards employees not having to be coming to the office every day, but probably working from home and only visiting the office when necessary. It will also assist in the simplification of processes that would contribute immensely to the mindset of all the members of management and employees, for example touch screen technology to ease the burden and having an effective system in place.

6.2.13 Need for the management to use the system for strategic planning

Finally, there is a need for management to make use of the system for strategic decision making, and this is exactly the objective of the HRIS. Companies however do not believe that the system is able to assist in decision making processes such as appointing a qualified person for a particular position, promotion options, and paying the right salary to a particular employee, to name a few. Such decisions are strategically inclined and would be best done through an effective system in place.

The researcher believes that the above guidelines should be taken into consideration in the implementation and maintenance of an HRIS in the retail sector, with the inclusion of the above mentioned modules and regular upgrades of the

system, and also with the modification and consolidation of all the processes inclusive of the latest technological advances.

The following recommendations are the proposed guidelines to be put in place for effective implementation of the HRSI:

i) **Management commitment:** Management should be involved and committed in the implementation and maintenance of the HRIS through financial support and decisions to improve the system.

ii) **Effective business process management (BPM):** This should be in place to determine the goals and objectives of HRIS implementation.

iii) **Appointment of a steering committee:** This is important in order to guide the HRIS implementation process and the users of the system.

iv) **Prioritisation of the HRIS:** This is needed in order to create the importance of the system in the minds of the employees and other stake holders.

v) **Simplification of the functionalities:** Customise some of the system functionalities for simplification purposes and eliminate complexities and difficulty in operation.

vi) **Conduct effective training:** An effective training programme will equip the users and employees in general on how to make good use of the system to their benefit.

vii) **Capture the details of all employees:** Companies should capture the details of all the employees irrespective of their terms of contract, and also make use of the ESS module to make the HR processes easier, educative and convenient.

viii) **Conduct recruitment on the system:** Recruitment should be conducted directly onto the system to eliminate duplication and error because the applicant will be given the opportunity to capture their information into the system.

ix) **Performance management:** Performance management should be conducted directly onto the system for simplification and easy access to current information of all the employees.

x) **All the required modules in one portal:** Make use of all the required HRIS modules in one system without using other systems to support the preferred HRIS.

6.3   LIMITATIONS TO THE STUDY

This research was based on HRISs in the retail sector. It had some setbacks in terms of obtaining permission and access into the retail sector for data collection. Most of the companies did not allow the researcher to have access to information, which is a challenge to the research. There were also delays in fixing the dates and time of the interviews that were approved, which is part of the reasons why the research took a bit longer than expected. These limitations perhaps reflected on the findings in two retail companies which suggest lack of effective use of the HRIS, leading to not making use of all the required modules on the system.

6.4   FURTHER STUDY

There is a need to conduct further studies on a larger number of companies and employees to gain a better understanding of i) what is needed, ii) the effect in the implementation and use of the HRIS, and iii) how an HRIS could be used for effective to the benefit of companies in general. Also, there is a need to conduct research on how HRIS practices contribute to the bottom line of the organisations.

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SEMI-STRUCTURED QUESTIONNAIRE

RQ1: What are the reasons for organisations not implementing Human Resource Information Systems (HRISs) effectively?

SRQ1.1: What factors affect effective HRIS implementation in the retail sector?

Q1.1.1: Does your organisation make use of an HRIS? If yes, what is the name of the HRIS? If no, why not?   **Comment:**

Q1.1.2: Is there a standardised HRIS specifically for the retail industry? If yes, what is it called? If no, why not?   **Comment:**

Q1.1.3: The HRIS should capture all employees' details. Is it correct?   **Comment:**

Q1.1.4: Do all the employees have access to the HRIS? If yes, what level of access? If no, why not?   **Comment:**

Q1.1.5: Does your organisation conduct any form of training to equip the users on how to make good use of the HRIS? If yes, how? If no, why not?   **Comment:**

Q1.1.6: Is there effective information security in place to safeguard the HRIS? If yes, what kind? If no, why not? (e.g. software against computer hacking and anti-virus)   **Comment:**

Q1.1.7: Identify the critical factors that your organisation went through in the implementation of the HRIS?

No	**Factors** **(Ticking choice or use an X)**	**Disagree**	**Neutral**	**Agree**
1	HRIS team work and composition			
2	Top management support			
3	Business Plan and vision			
4	Software development			
5	Project management			
6	Change management program (Recruit HRIS prof)			

Mention other factors that your organisation went through in HRIS implementation?

Q1.1.8: *Does the size of your organisation and its operation determine the effectiveness of the HRIS? If yes, why do you say so? If no, why not?*

Comment:

Q1.1.9: *Is there effective team work and staff participation in your organisation to support the implementation process of the HRIS? If yes, why do you say so? If no, why not?*

Comment:

Q1.1.10: *Does the management have total confidence and trust in the HRIS in terms of usage and performance? If yes, what is the level of trust?* **(*Ticking choice or use an X*).** *If no, why not?*

(1) High   [ ]   (2) Medium [ ]   (3) Low   [ ]

Comment:

SRQ1.2: What strategies have organisations achieved in HRIS implementation?

Q1.2.1: *Does the implementation of the HRIS assist your organisation to accomplish the following strategies listed below?*

	Strategies **(Ticking choice or use an X).**	**Disagree**	**Neutral**	**Agree**
	Recruitment			
	Training			
	Development			
	Reward			

What other strategies does your organisation accomplish?

Q1.2.2: *Are there any management incentives and target bonuses given to the HRIS users? If yes, what kind? If no, why not?*

Comment:

Q1.2.3: *How effective is the capturing, recording, and retrieval of data from the HRIS. Why do you say so?*

Comment:

Q1.2.4: *Has the HRIS been able to provide confidentiality, privacy and security of personnel information of the employees? If yes, how do you know? If no, why not?*

Comment:

RQ 2: How do organisations utilise HRISs in order to achieve the benefit thereof in the retail sector?

SRQ2.1: What are the HRIS modules the retail sector uses to have an effective system in place?

Q2.1.1: Indicate which of these modules are in the HRIS of your organisation?

	Modules **(Ticking choice or use an X)**	**Yes**	**No**	**No Idea**
	Payroll			
	Time management			
	Benefit administration			
	HR (MIS)			
	Recruiting and Learning system			
	Performance record			
	Employee self-service			
	Scheduling			
	Absence management			
	Analytics			

What other modules does the HRIS have?

Q2.1.2: Do the modules suit the kind of business that your organisation operates on? If yes, how? If no, why not?

Comment:

Q2.1.3: Which of the HRIS modules are frequently used by your organisation?

Comment:

Q2.1.4: Does your organisation upgrade the HRIS and software development? If yes, how often and why? If no, why not?(e.g. Daily)

Comment:

Q2.1.5: How would you rate the contribution of HRIS to the sustainability, continuity and profitability of your organisation? (Ticking choice or use an X)

(1) High   [ ]   (2) Medium [ ]   (3) Low   [ ]

Comment:

SRQ 2.2: **How do organisations use HRISs in their decision making processes?**
Q2.2.1: *Is the HRIS regarded as an administrative task or strategic task?* **<u>Comment</u>:**
Q2.2.2: *Is HRIS represented at the managerial level in your organisation?* **<u>Comment</u>:**
Q2.2.3: *How would you rate management satisfaction with the HRIS?* **(Ticking choice or use an X)** (1) High   [ ]   (2) Medium [ ]   (3) Low   [ ] **<u>Comment</u>:**
Q2.2.4: *How would you rate staff satisfaction with the HRIS?* **(Ticking choice or use an X)** (1) High   [ ]   (2) Medium [ ]   (3) Low   [ ] **<u>Comment</u>:**
Q2.2.5: *How would you rank the level of human resource (HR) practices with the use of the HRIS in your organisation and why?* **(Ticking choice or use an X)** (1) High   [ ]   (2) Medium [ ]   (3) Low   [ ] **<u>Comment</u>:**
Q2.2.6: *Is the HRIS able to contribute to the efficiency and effectiveness of your departmental activities? If yes, how? If no, why not?* **<u>Comment</u>:**
Q2.2.7: *What are the benefits that you could identify that your organisation has been able to achieve in the implementation of an HRIS?* **<u>Comment</u>:**
Q2.2.8: *Does your organisation have any form of policy, guideline or framework in place for effective implementation and maintenance of the HRIS? If yes, mention? If no, why not?* **<u>Comment</u>:**
Q2.2.9: *Are you totally satisfied with the HRIS or will you recommend that your organisation should acquire an alternative system for effective performance of your duty, and why?* **<u>Comment</u>:**
Q2.2.10: *What are the future expectations of your organisation with regard to the implementation of the HRIS?* **<u>Comment</u>:**

Thank you for your time and patience in answering these questions. Your contribution is highly appreciated and will be commended accordingly.

APPENDIX B: INTRODUCTORY LETTER

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INTRODUCTORY LETTER FOR THE COLLECTION OF RESEARCH DATA

Mr Emmanuel Udekwe is a Registered Student at Cape Peninsula University of Technology.

Degree: M-Tech in Business Administration. .

Student Number: 204186951.

Contact details: emmaudekwe@gmail.com and cell number 0833122603

The Title of This Thesis: The Impact of Human Resource Information Systems on Selected Retail Outlets in Western Cape.

The aim of this research: To explore how HRIS systems can be implemented and maintained in order that organisations can gain the expected benefits of the system. A further aim is to propose guidelines for the implementation and maintenance of HRIS systems.

The Supervisor is Dr Andre de la Harpe. His email addresses are delaharea@cput.ac.za and his cell number is 0824481058.
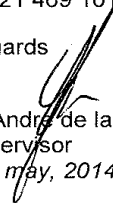
In order to meet the requirements of the university's Higher Degrees Committee (HDC) the student must get consent to collect data from organisations which they have identified as potential sources of data.

In this case the student will use semi-structured questionnaires to gather the data.

If you agree to this, you are requested to complete the attached form (an electronic version will be made available to you if you so desire) and print it on your organisation's letterhead.

For further clarification on this matter please contact either the supervisor(s) identified above, or the Faculty Research Ethics Committee secretary (Ms V Naidoo) at 021 469 1012 or naidoovve@cput.ac.za.

Regards

Dr Andre de la Harpe.
Supervisor
30th may, 2014

APPENDIX C: CORRESPONDING EMAILS WITH PARTICIPANTS

1.   **From: Emma Udekwe**   **To: All the Participants**
        Date: Feb 23, 2015

Good evening,

I just felt it would be wise to send you a transcribed copy of the interview I had with you last month.

Please feel free to make corrections if need be and send back to me, but if you are OK with it, then we can go ahead.

No names will be on the publication.

Regards
Emma

Attachments area
Preview attachment Interview with each of the participants.docx

2.   **From: Pumla Hako**   **To: Emma Udekwe**
        Date: Feb 24, 2015

Hi Emma

Thank you for this. Please refer to my comments on the document. Please go through it again for minor errors. I did not go through the whole document just go until the end. Other than that, am fine with the content.

Kind regards
Pumla

3.   **From: Emma Udekwe**   **To: Pumla Hako**
        Date: Feb 24, 2015

Good morning and thank you so much for your time, I will definitely do that.

Regards and remain blessed.
Emma

4.   **From: Shane Damons**   **To: Emma Udekwe**
        Date: Feb 24, 2015

Hi Emmanuel

This is a true reflection of our discussion. Nothing to add from…

Shane

5.   **From: Sandra Apollis**   **To: Emma Udekwe**
        Date: Feb 24, 2015

Hi Emma Go ahead – all in order. Thanks and good luck.

Regards
Sandra