

**UTILIZATION OF HUMAN RESOURCES MANAGEMENT  
INFORMATION SYSTEMS AMONG SMALL AND MEDIUM  
MANUFACTURING ENTERPRISES IN NAIROBI.**

**BY**

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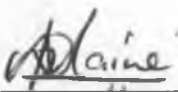
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## DECLARATION

This management research project is my original work and has not been submitted for degree award in any other university.


Signed 

Date 16<sup>th</sup> November 2010

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This management research project has been submitted for examination with my approval as university supervisor

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## **DEDICATION**

This project is dedicated to my late mother, Emily Muthoni Maina and all those who believe in hard work of their own hands.

## ACKNOWLEDGMENT

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## ABSTRACT

The utilization of Human Resource Management Information Systems (HRMIS) promises to enable Human Resource (HR) departments deliver more service with fewer resources, save money, be more efficient, and automate to make time for strategic planning. While windows and client server technologies offer flexible, low-cost, generic HRMIS's for the small firms, little is known of the extent of their utilization among the Small and Medium Enterprises (SME) in Kenya's manufacturing sector.

To fill this gap a survey of the utilization of HRIS by 50 SME's operating within Nairobi and its environs was undertaken, from a population of 450 firms registered by the Kenya Association of Manufacturers (KAM). Results show that while the SMEs had HRMIS features capable of providing HR information for strategic use, their utilization was for automating personnel administration. The most reasons cited for the unsophisticated usage of HRMIS among manufacturing SMEs included lack of a HR strategy, size of the firms and lack of HRIS consultants. These results were drawn from manufacturing firms in Nairobi and its environs, and being an exploratory study, further work is required on the utilization of HRMIS among small manufacturing firms.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the study

Organizations of all sizes, structures and in all industry fields are recognizing the need to readdress the management of what has been in recent years known as their most valuable asset, their human resources. Cole (2003) explains that Human Resource Management (HRM) of today faces operational, tactical and strategic challenges that did not previously exist and their outdated and inflexible information tools of yesteryear, such as paper-based and form-based information systems, spreadsheets and word documents, as well as large scale Enterprise Resource Planning (ERP) systems that do not do much more than burden already complicated processes, have made it extremely difficult to meet these challenges.

Human Resource (HR) departments traditionally known as the cost center of businesses due to too much time spent on administrative and compliance tasks, have now been turning to new technological developments, created not just for their specific field, but as it relates to the entire business entity writes Cole (2003). These systems facilitate more collaboration between the HR practitioners, the line managers and the employees, helping them to be better able to manage their own projects. They also present the possibility for HR practitioners to become fundamental partners in the strategic planning of their companies. It is advances in computing technologies that has made the role of HRMIS (Human Resources Information System) an important one.



The wide availability of integrated HRMIS based on intranets and client server technologies and the familiar windows desktop environment makes the possibility of their use in SME's worth examining, given the benefits often associated with the systems. Despite the potential of HRMIS to transform the HR function in SME's, their use in personnel and human resource management (HRM), and the types of technology its practitioners employ has largely been neglected in these literatures both in terms of theory and evidence. A small amount of case study and survey work exists (Kinnie and Arthurs, 1996; Kossek *et al.*, 1994; Broderick and Boudreau, 1992; Torrington and Hall, 1989; Hall and Torrington, 1986; Legge, 1989; Martinsons, 1994, 1996), some of which has been theorised (Torrington and Hall, 1989; Martinsons, 1994).

In the UK, the HR profession has been generating its own survey data since 1982, such as in the joint Institute of Manpower Studies/ Institute of Personnel Management (IMS/IPM), computers in personnel surveys, and the IES (Institute for Employment Studies/Institute for Personnel and Development (IES/IPD) surveys. In addition there are articles from personnel/HR publications containing checklists of how to implement and run HRMISs as well as anecdotal accounts of best practice and individual organizational successes.

The need for HR information technology systems is increasing. With HR staff finding a vast array of options in HR information technology systems, it is increasingly important to analyze and weigh all options available. Choosing an HR information technology system should be looked at as an investment that will grow with the department and company's needs.

The new kinds of HRMIS are today based on technologies such as client server architecture, intranets, workflow and integrated GroupWare that are designed to provide HR professionals with seemingly endless possibilities and flexibilities, beyond the automation of personnel roles. These kinds of HRMIS's have a particular relevance in SME's that may find them not just affordable but also generic. One aspect of all of the academic studies published in the HRMIS area to date is that their data collection occurred no later than 1992.

Since then with the rise of Windows, the normalization of PC based office work (Kinnie and Arthurs (1996) were still discussing the difference between mainframes and PCs), client server architecture and the affordable HRMIS, the HRMIS market has grown significantly across the spectrum of organizational types. The small business sector is seen as a growth area by some HRMIS software vendors who proffer flexible, low-cost, generic, Windows-based products. Recent practitioner literature examining the use of HRMIS in small companies advanced the view that the issues they face regarding HRMIS use are slightly different to their larger counterparts, yet research in HRMIS to date is oriented to the larger organization. This suggests the need to study the use of HRMIS among SME's in Kenya's manufacturing sector.

### **1.1.1 SME's in Kenyans Manufacturing Sector**

The role of SME's in the manufacturing sector is acknowledged and has been a subject of debate in developing and developed countries alike. Small industries were seen to deserve support but mainly in sectors where modern production methods could not be immediately applied.

Kilby (1969) sees SMEs as a quasi-sponge for urban employment and a provider of inexpensive consumer goods with little or no import content, serving an important pressure-releasing and welfare-augmenting function. SMEs also contribute to long-run industrial growth by producing an increasing number of firms that grow up and out of the small sector.

(KAM Newsflash 2010) outlined the emergence of wholly modern small- and medium-scale Kenyan industries is likely to be a prerequisite for any enduring industrialization in that country. The current study focuses on the formal manufacturing sector SME's, most of whom are members of the Kenya Association of Manufacturers.

(KAM Directory 2003) KAM has approximately 600 members drawn from formal sector industries comprising of small, medium and large enterprises. All together, the members constitute 13 industrial sectors. More than 80 per cent of the members are based in the capital city Nairobi, with the rest spread out in other major towns and regions. To consolidate it's membership, KAM has developed regional chapters at the Coast, Nyanza, Western, Nakuru, Eldoret and Athi River. Other major towns like Thika and Nyeri also have a fairly high concentration of industries. Regional chapters exist to locally address members concerns with government authorities. Membership is structured into three categories of ordinary, associate, and affiliate membership (KAM Directory 2003).

Ordinary membership according to (KAM Directory 2003) is open to companies that are directly involved in processing, manufacturing or any other productive methods that have direct inputs into the expansion of industries. Associate membership is extended to firms which have direct interest in the expansion of industry either through the provision of

services or other inputs. Also included in this category are companies offering specialized consultancy services to industry. Finally, affiliate membership is reserved for small associations within industry. Membership fees are based on a company's annual turnover and are renewable every year (KAM Directory 2003).

The focus on SME's in the manufacturing sector is significant bearing in mind that the country's vision is to become industrialized by the year 2030, and the use of HRMIS's by SME's may assist actualize the vision. Thus determining the use of HRMIS, within a sector viewed an important contributor in industrialization, is important from a policy and implementation point of view. Perhaps, by adopting HRMIS, these SME's could provide the much needed leadership in the process of industrialization. This is evidently the vision of these SME's based on their combined vision as reflected in the vision of their association, KAM.

KAM vision and mission are to drive the industrialization process in Kenya and the region, and to promoting competitive local manufacturing in liberalized markets. IT promotes these ideals by providing an essential link for co-operation, dialogue and understanding with the government by promoting trade and investment, upholding standards and representing members' views and concerns to the relevant authorities. Thus by surveying the extent to which, members of KAM that have less than 300 employees use HRMIS, it may be possible to answer the question posed in this research about the use of HRMIS among SME's in Kenya.

### **1.1.2 Human Resources Management Information System**

Torrington (1989) defines Human Resources Management Information System (HRMIS) as an integrated system designed to provide information used in HR decision making. HRMIS shape an integration between human resource management (HRM) and Information Technology (IT). HRMIS support planning, administration, decision-making, and control. The system supports applications such as employee selection and placement, payroll, pension and benefits management, intake and training projections, career-pathing, equity monitoring, and productivity evaluation.

These information systems increase administrative efficiency and produce reports capable of improving decision-making (Gerardine 1986: 15). Recent developments in technology have made it possible to create a real-time information-based, self-service, and interactive work environment. Personnel Information Systems have evolved from the automated employee recordkeeping from the 1960s into more complex reporting and decision systems of late (Gerardine, 1986: 15). Today, managers and employees are assuming activities once considered the domain of human resource professionals and administrative personnel. This represents a significant break with the past, but an improvement in overall organizational effectiveness.

Given the authority and relevant accessible information for decision making, both managers and employees respond more quickly to changes (Torrington -Hall, 2002). Tannenbaum (1990) therefore, defines HRMIS as a technology-based system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information regarding an organization's human resources.

Kovach et al., (1999) defined HRMIS as a systematic procedure for collecting, storing, maintaining, retrieving, and validating data needed by organization about its human resources, personnel activities, and organization unit characteristics. Furthermore, HRMIS shape an integration between human resource management (HRM) and Information Technology.

It merges HRM as a discipline and in particular basic HR activities and processes with the information technology field (Gerardin, 1986: 15). As is the case with any complex organizational information system, an HRIS is not limited to the computer hardware and software applications that comprise the technical part of the system it also includes the people, policies, procedures, and data required to manage the HR function.

Kovach et al., (1999) presented the three major functional components in any HRMIS. The Input function enters personnel information into the HRMIS. Data entry in the past had been one way, but today, scanning technology permits scanning and storage of actual image off an original document, including signatures and handwritten notes. The maintenance function updates and adds new data to the database after data have been entered into the information system. Moreover, the most visible function of an HRIS is the output generated. According to Kovach et al., (1999), to generate valuable output for computer users, the HRMIS have to process that output, make the necessary calculations, and then format the presentation in a way that could be understood. However, the note of caution is that, while it is easy to think of HR information systems in terms of the hardware and software packages used to implement them and to measure them by the number of workstations, applications or users who log onto the system, the most important elements of HRIS are not the computers, rather, the information.

The bottom line of any comprehensive HRIS have to be the information validity, reliability and utility first and the automation of the process second.

HRMIS meet the needs of a number of organizational stakeholders. Typically, the people the firm who interact with the HRIS are segmented into three groups that is HR professionals, managers in functional areas (production, marketing, engineering etc.) and employees (Anderson, 1997). HR professionals rely on the HRMIS in fulfilling job functions (regulatory reporting and compliance, compensation analysis, payroll, pension, and profit sharing administration, skill inventory, benefits administration etc.). Thus, for the HR professional there is an increasing reliance on the HRMIS to fulfill even the most elementary job tasks.

As human capital plays a larger role in competitive advantage, functional managers expect the HRIS to provide functionality to meet the unit's goals and objectives. Moreover, managers rely on the HRIS's capabilities to provide superior data collection and analysis, especially for performance appraisal and performance management. Additionally, it also includes skill testing, assessment and development, résumé processing, recruitment and retention, team and project management, and management development. Finally, the individual employees become end users of many HRMIS applications. The increased complexity of employee benefit options and the corresponding need to monitor and modify category selections more frequently has increased the awareness of HRIS functionality among employees. Web-based access and self-service options have simplified the modification process and enhanced the usability of many benefit options and administration alternative for most employees.

Functional HRMIS must create an information system that enables an assimilation of policies and procedures used to manage the firm's human capital as well as the procedure necessary to operate the computer hardware and software applications (Hendrickson, 2003). While information technology affects Human Resource (HR) practices (Torrington Hall, 2003) HRMIS and HRMIS administration comprise a distinct supporting function within HR.

Rapid computing technology has allowed more transactions to occur with fewer fixed resources. Typical examples are payroll, flexible benefits administration, and health benefits processing. Though technologies of early mainframes provided significant efficiencies in these areas, the difference is that the record processing efficiencies that were once only available to large firms are now readily available to any organization size (Kovach, 2001).

Most often, as with processes, computer technology is designed to improve effectiveness either by in terms of the accuracy of information or by using the technology to simplify the process. This is especially the case where large data sets require reconciliation. However, onerous manual reconciliation processes may be executed faster, but also with near perfect accuracy using automated systems. Using computer technology in these processes ensures accurate results and offer substantial simplification and timeliness over manual processing. Consequently, the vast majority of HR functions have had some degree of automation applied in order to gain both efficiency and effectiveness.



While many of the application areas' gains are through increased effectiveness and efficiency over manual processing, some are only possible using contemporary technologies. Most notably, computer-based (web-based) training is a growing area of HR practice that was not available until computer software was created. Even computer based training was not as practical as it is today because it was geographically dispersed until the training was upgraded from computer-based to web-accessible training.

However, by taking traditional computer-based training programs and making them accessible on the Internet, firms have created a powerful tool to upgrade and assess employee skill sets. Moreover, many other traditional HR functions have evolved Information Technology (IT) -dependent components with the advent of the Internet.

Online recruitment centers, along with the ability to conduct virtual interviews, background checks, and personnel tests on-line have dramatically changed those processes, increasing the geographic reach of firms for potential employees.

#### **1.1.2.1. Benefits of HRMIS**

An HRIS system represents a large investment decision for companies of all sizes. Therefore, a convincing case to persuade decision makers about the HRMIS benefits is necessary. The common benefits of HRIS frequently cited in studies included, improved accuracy, the provision of timely and quick access to information, and the saving of costs (Lederer, 1984; Wille and Hammond, 1981). Lederer (1984) discussed why the accuracy and timeliness of HRIS is very important in terms of operating, controlling, and planning activities in HR. In addition, Kovach et al., (2002) listed several administrative and strategic advantages to using HRMIS.

Similarly, Torrington (2002) pointed out some reasons why companies should use HRIS. These include; Increase competitiveness by improving HR practices, produce a greater number and variety of HR operations, shift the focus of HR from the processing of transactions to strategic HRM, make employees part of HRMIS, and reengineer the entire HR function.

In their 2002, HRIS survey, Watson Wyatt found that the top four metrics used in formal business cases supporting HRIS were improved productivity within HR organization, cost reductions, return on investment, and enhanced employee communications. However, companies realize many of these cost reductions and efficiency gains early in the implementation of an HRMIS system, so they provide compelling evidence needing to get a project up and running.

In fact, the payback period, or the time it takes to recoup the investment, may be as short as one to three years. HRMIS contribute to cost reductions, quality/customer satisfaction, and innovation (Broderick and Boudreau, 1992). According to Sadri and Chatterjee (2003) computerized HRMIS function enable, faster decision making, development, planning, and administration of HR because data is much easier to store, update, classify, and analyze. Moreover, while it may be possible to identify many of the relevant costs (e.g., software and hardware), it is more difficult to quantify the intangible benefits to be derived from an HRMIS system. Beyond cost reductions and productivity improvements, HRMIS potentially and fundamentally affect revenue channels. However, establishing direct and objective benefits measures is more difficult to achieve.

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On the other hand, there are costs associated with HRMIS implementation. Moreover, to capitalize on all HR possibilities, workers need to have personal computers and global Internet connections. Some companies facilitate this by providing employees computer discount programs to encourage home usage. In addition, there is inevitably transition costs associated with moving from traditional HR to an HRMIS, including slowdowns, mistakes, and other consequences associated with changing legacy systems to integrated suites (Brown, 2002). Hardware costs for servers and software costs for application programs entail sizeable initial outlays and continuing costs over time as better technology becomes available.

While many companies are adopting HRIS systems and extolling their benefits, others are reluctant in embarking on such an expensive and time-consuming change. Nevertheless, some firms are adopting less complex forms before attempting to transform their HR departments. However, for those who have already adopted HRMIS, many are yet to realize its full benefits. HRMIS is an effective and efficient catalyst for integrating human resource management and Information Technology. HRMIS support HR functional applications such as employee selection and placement, payroll, pension and benefits management, intake and training projections.

## **1.2 Statement of the Problem**

It is acknowledged that the use of a HRMIS has the potential to mainstream the role of HRM in attaining the operational and strategic objectives of a firm. However, previous studies on HRMIS usage focused on large firms and earlier mainframe HRMIS's that automated personnel administration (Kinnie and Arthurs, 1996; Kossek *et al.*, 1994).

The need to survey the use of HRMIS, and in particular, within the SME sector is evident from advances in information and communication technologies (ICT) and the possibility of HRMIS's contributing to strategic HRM. ICT advances has resulted in widely available, affordable, integrated HRMIS based on intranets, client server technologies and windows desktop environment. These systems are flexible and capable of providing HR information for strategic use in organizations, in addition to operational information. While this has raised the possibility of using HRMIS, for operational, tactical and strategic HR functions, few studies have focused on their use among SME's. Harriet (2007) studied the HR strategies orientation, organizational commitment and firm performance in large private manufacturing firms in Kenya and less is told about the SMEs.

According to Omamo (2004) in her study to analysis the factors used to attract and retain employees in a competitive environment stated that use of new technologies not only attract and help retain employees but also improve the image of the company. This study will also attempt to establish if utilization of HRMIS would assist SME in HRM. Therefore, there is need for a study on SME's that have been found to create jobs. For instance, the pioneering work of Birch (1987) shows that small plants and firms are responsible for most of the new job creation in the United States. Baldwin and Picot (1995) for the Canada, find that net job creation by smaller establishments is greater than that by large establishments. In case of Germany, Wagner (1995) suggests that small firms create quite a large share of all new jobs. Hart and Hanvey (1995) also highlight an important role of new and small indigenous firms in the job generation process in United Kingdom for the period 1986-1990.

Research done by Tiren(2003) who conducted a study on use of HRMIS in HRM in the banking sector in Nairobi Kenya to establish the perceived benefits of using HRMIS in HRM. She also attempted to study the challenges and problems faced by banks in the use of HRMIS. Apollo (2006) sought to identify the extent of application of IT (information Technology) in HRM in insurance industry. This research has shown that IT has been applied widely in business strategies (Wamingi 2003) in marketing to assist in product planning, pricing decision, and advertising, sales promotion strategies, forecasting and determining the channels of distribution. In accounting in recording and reporting business transaction and other economic events (Tiren 2003).

While the scholars have devoted much attention to examining information technologies in HR, they have not adequately explained the utilization of HRMIS in SME in Kenya. Thus the current study seeks to focus on the utilization of HRMIS in SME's by asking the question to what extent do SME's in Kenya's manufacturing sector utilizes HRMIS in their operational, tactical and strategic HR purposes?

### **1.3 Objective of the Study**

The objective of the study is to determine the HRMIS utilization among SME's in the manufacturing sector in Kenya.

### **1.4 Significance of the Study**

Findings from this study will be of relevance to researchers, management of SME's and policy organs of government with interests in the manufacturing and SME sector.

The results on the extent to which HRMIS has been adopted, the kind of use, at the operational, tactical and strategic levels will provide exploratory empirical data on which other scholars with interest in HRMIS can use to further this line of inquiry. In particular, it will help confirm findings about whether use in an SME context differs with results in other countries for large firms. Being an exploratory study, the descriptive results will inform future work about the phenomenon of HRMIS adoption among the manufacturing SME's in Kenya.

The managers of SME's in the manufacturing sector will find results on the extent of use of HRMIS useful in planning their adoption strategy. The descriptive nature of the study will also provide them with an indication of the types of systems, used, by other SME's in the manufacturing sector, their functionalities, and the HR data processed by HRMIS's. Thus the study will provide the management of manufacturing firms with a reference point in their implementation of HRMIS to mainstream the role of HR in attaining their operational, tactical and strategic objectives.

The government ministry and policy making bodies in charge of SME's and the manufacturing sector will also find the results of this study informative. In particular, they would be able to know the extent to which they need to put in place interventions that will facilitate the use of HRMIS to boost the performance of HR in managing the manufacturing activities in the SME sector. Thus findings may assist to enhance the potential of SMEs to create the much needed jobs in the manufacturing sector.

## CHAPTER TWO: LITERATURE REVIEW

This chapter provides a review of the literature pertinent to the study. Included in the review is the concept of a HRMIS, its evolution, examples of commercially available HRMIS's, and studies on HRMIS usage. It also explores the meaning of SME's and provides a critical review of the literature on the use of HRMIS.

### 2.1 The Evolution in use of Information Technology in HRM

Despite more recent claims suggesting that HRM is a laggard in terms of Information Technology (IT) usage (Kinnie and Arthurs, 1996; Hall and Torrington, 1986), this was not the case 40 years ago. Martinsons (1994) traces the use of computers in HRM to the 1960s, when personnel management functions of payroll, benefits administration and other transaction processing applications, such as employee record holding were automated. At this time the information was held on a mainframe in flat file format with the databases being interrogated via simple keyword searches.

McKay and Torrington (1986) note that, since then, computer use in HR has been characterized by alternating periods of slow and rapid growth, partly because of the strategic focus in HR and advances in IT. The move to a strategic focus in HRM away from personnel issues produced an increase in demand for useful information about the human resource. For instance, HR scholars in the UK and USA begun calling for HR practitioners to innovate in their IT usage, arguing that this would result in a new role for the HR department would emerge. Torrington and Hall (1989) predicted that the use of IT would transform HR into an information center, internal consultant and change agent.

In the US Wiley (1992) argued that use of IT would change the role of HR to that of being a service provider, cost manager, business partner, facilitator, employee advocate and consultant.

The predictions, by scholars, however, did not materialize prior to the introduction of windows as an operating system. For instance, various case studies of HRMIS which emerged in the pre-Windows era were reported to have fallen somewhat short of this vision (Green, 1987; Carolin and Evans, 1988; Winsor, 1988; Kossek *et al.*, 1994; Kinnie and Arthurs, 1996). The introduction of Windows programming languages, and the resulting easy to use interface, prompted the birth of many smaller software houses writing affordable, easily customizable, modular HRMISs. The reporting capabilities of these products were more sophisticated than their mainframe-based predecessors, and they could hold information about every aspect of the human resource function.

Despite some conflicting evidence (Hall and Torrington, 1998; Cully *et al.* 1999) suggestions of a perceived increase in the strategic influence of HRM and continued devolution of HR practice to the line (IES/IPD, 1997) implies a central role for HRMISs in supporting the HR function and increasing its value to the organization (e.g. through intranets and expert systems). This shift to a “harder” focused HR department is also identified by Truss *et al.* (1997) who found that whilst organizations concentrated their rhetoric on the soft, commitment model, their employees reported that they were subject to harder, more quantified forms of control. The next section examines the nature of contemporary HRMISs and explores how they might be seen to be more compatible with the harder model of HRM.



## 2.2 The Concept of an HRMIS

According to (Tannenbaum, 1990) HRMIS is defined as one which is used to acquire, store, manipulate, analyze, retrieve and distribute information about an organization's human resources. In practice, there is a dichotomy in the analysis of HRMIS usage, with literature predicting that there will be at least two extremes of use. The Human Resource Information System (HRMIS) being a software or online solution for the data entry, data tracking, and data information needs of the Human Resources, payroll, management, and accounting functions within an organization. A HRMIS may be packaged as a data base with different capabilities. An organization is therefore supposed to pick the HRMIS based on the capabilities and needs of the organization.

An effective HRMIS provides information on just about anything the organization needs to track and analyze about employees, former employees, and applicants. The organization will need to select a HRMIS and customize it to meet exert needs. With an appropriate HRMIS, Human Resources staff enables employees to do their own benefits updates and address changes, thus freeing HR staff for more strategic functions. Additionally, data necessary for employee management, knowledge development, career growth and development, and equal treatment is facilitated. Finally, managers can access the information they need to legally, ethically, and effectively support the success of their reporting employees.

### 2.3 Use of an HRMIS

Kovach and Cathcart (1999) note that a HRMIS could be used, first, for administrative purposes to reduce costs and time and, second, for more analytical decision support. Similarly, Martinsons (1994) classified different types of HRMIS usage according to its degree of sophistication. He argued that payroll and benefits administration, and the keeping of employee and absence records electronically was unsophisticated, because of its electronic replication of the contents of the HR department's filing cabinet, and are best described as simple minded automation (Martinsons, 1994).

On the other hand, use of IT in recruitment and selection, training and development, HR planning and performance appraisal was characterized as sophisticated, because of the information generated to provide support for decisions which involve expert judgment, and more advanced manipulation of information about the human resource which would reflect a hard HRM focus. This study adopts a similar stance in relation to the analysis of information usage data, classifying it as either administrative or analytical in character.

Survey results have consistently demonstrated the unsophisticated use of HRMIS output by HR practitioners. For instance, Hall and Torrington's (1986) found that most organizations they surveyed were using IT as a workhorse of the personnel function, easing the administrative burden of record keeping and pay administration, rather than for forecasting, analyzing and supporting decision making. Empirical reports since then have indicated that little has changed (Kinnie and Arthurs, 1996; IES/IPD, 1997, 1998, 1999). However, HRMIS are widely used in various HR management functions such as planning, recruitment, training, development, compensation and occupational health.

### **2.3.1 Planning process**

Human Resource Planning (HRP) process reviews human resources requirements to ensure that the organization has the required number of employees, with the necessary skills, to meet its goals, also known as employment planning. HRP is a proactive process, which both anticipates and influences an organization's future by systematically forecasting the demand for and supply of employees under changing conditions, and developing plans and activities to satisfy these needs.

According to Martinsons (1994) the HRMIS is used as a decision support system to perform such tasks include forecasting demand for labor considering organizational strategic and tactical plans, economic conditions, market and competitive trends, social concerns, demographic trends, and technological changes.

### **2.3.2 Recruitment process**

Dessler (2002) defines recruitment as the process of searching for and attracting an adequate number of qualified job candidate, from whom the organization may select the most appropriate to field its staff needs. The process begins when the need to fill a position is identified and it ends with the receipt of résumés and completed application forms. The result is a pool of qualified job seekers from which the individual best matching the job requirements can be selected. HRMIS may be used to post vacant positions on the internet. The steps in recruitment process include identification of job openings, determination of job requirements, choosing appropriate recruiting sources and methods, and finally, generating a pool of qualified recruits. Job openings are identified through human resource planning (HRP) and the job requirements are determine.

This involves reviewing the job description and the job specification and updating them. Appropriate recruiting sources and methods are chosen because there is no one, best recruiting technique. Consequently, the most appropriate for any given position depend on a number of factors, which include organizational policies and plans, and job requirements Dessler (2003).

### **2.3.3 Selection process**

Cole (2003) defines selection as the process of choosing individuals with the relevant qualifications to fill existing or projected openings. Data and information about applicants regarding current employees, whether for a transfer or promotion, or outside candidates for the first time position with the firm are collected and evaluated by use of HRMIS as stated by Torrington (1986). The steps in the selection process, in ascending order include preliminary reception of applicants, initial applicant screening, selection testing, selection interview, background investigation and reference checking, supervisory interview, realistic job previews, making the hiring decision, candidate notification, and evaluating the selection process. However, each step in the selection process, from preliminary applicant reception and initial screening to the hiring decision, is performed under legal, organizational, and environmental constraints that protect the interests of both applicant and organization.

### **2.3.4 Orientation, training and development process**

Cole (2003) defines employee orientation as the procedure of providing new employees with basic background information about the firm and the job. Is more or less, considered as one component of the employer's new-employee socialization process.

Socialization process is an ongoing process of initialing in all employees the prevailing attitudes, standards, values, and patterns of behavior that are expected by the organization. Training however, according to Dessler (2003) is the process of teaching new or present employees the basic skills/competencies needed to perform their jobs. Whereas training focuses on skills and competencies needed to perform employees' current jobs, employee and management development is the training of long-term nature. The aim is to prepare current employees for future jobs with the organization or solving an organizational problem concerning, for example, poor interdepartmental communication. Training and development processes include needs analysis, instructional design, validation, implementation, and evaluation and follow-up.

### **2.3.5 Career planning and development process**

It is the deliberate process through which persons become aware of personal career related attributes and the lifelong series of activities that contribute to their career fulfillment. Individuals, managers, and the organization have role to play in career development. Individuals accept responsibility of own career, assess interests, skills, and values, seek out career information and resources, establish goals and career plans, and utilize development opportunities (Broderick and Boudreau, 1992).

The career stage identification entails career cycle (the stages through which a person's career evolves). These stages include the following: growth, exploration, establishment, maintenance, and decline stages. Occupational orientation identification is the theory by John Holland. This theory enumerates six basic personal orientations that determine the sorts of careers to which people are drawn.

They include realistic orientation, investigative orientation, social orientation, conventional orientation, enterprise orientation, and artistic orientation.

### **2.3.6 Performance appraisal process**

Performance appraisal is defined by (Cole 2003) as any procedure that involves setting work standards, assessing employee's actual performance relative to these standards, and providing feedback to the employee with the aim of motivating the worker to eliminate performance deficiencies or to continue to perform above par. Processes in performance appraisal contain three steps as stipulated by Broderick and Boudreau (1992); defining performance expectations, appraising performance, and providing feedback.

First, defining performance expectation means making sure that job duties and standards are clear to all. Second, appraising performance means comparing employees' actual performance to the standards that has been set, which normally involves some type of rating form. Third, performance appraisal usually requires one or more feedback sessions to discuss employees' performance and progress and making plans for any required development. Some of the appraisal methods include graphic rating scale, alternation ranking, paired comparison, forced distribution, and critical incident methods.

### **2.3.7 Employee Compensation and benefits process**

According to (Dessler, 2005) employee compensation involves all forms of pay or rewards accrued to employees and arising from their employment. This however consists of two main components: direct financial payments, and indirect payments.

While direct financial payments are in the form of wages, salaries, incentives, commissions, and bonuses, indirect payments are in the form of financial benefits like employer-paid insurance and vacations. Moreover, legal considerations in compensation, union influences, compensation policies, and equity and its impact on pay rates are the four basic considerations influencing the formulation of any pay plan. Cole (2003) says benefits are indirect financial payments given to employees. These may include supplementary health and life insurance, vacation, pension, education plans, and discounts on say company products. Furthermore, income and medical benefits to victims of work-related accidents or illness and/or their dependents, regardless of fault are all part of employees' compensation.

The processes in establishing pay rates involve the following five steps: First, conducting wages/salary survey to determine the prevailing wage rates for comparable jobs, which is central in job pricing. Second, determine the relative worth of each job (job evaluation) by comparing the job content in relation to one another in terms of their efforts, responsibility, and skills. This eventually results in wage or salary hierarchy.

Third, group similar jobs into pay grades, a pay grade comprises of jobs of approximately equal value or importance as determined by job evaluation. Forth, price each pay grade using wage curves. A wage curve is graphical description of the relationship between the value of job and the average wage paid for the job. However, if jobs are not grouped into pay grades, individual pay rates have to be assigned to each job. Fifth, fine tune pay rates. This involves correcting out-of-line rates and usually developing rate ranges.

### **2.3.8 Occupational health and safety process**

Occupational health and safety process aims at protecting the health and safety of workers by minimizing work-related accidents and illnesses. Laws and legislations to ensure and observe general health and safety rules bound employers. More so, rules for specific industries, for example, mining and rules related to specific hazards, for instance, asbestos have to be adhered to.

The following steps are important in this process. Checking for or removing unsafe conditions by using checklist to audit a company's adherence to safety rules that are guarded against hazards, which cannot be removed. Next, through selection, screening out of employees who might be accident prone for job in question without compromising the human right legislation. More so, establishing a safety policy, this emphasizes on the importance of practically reducing accidents and injuries. Setting specific loss control goals by analyzing the number of accidents and safety incidents and then set specific safety goals to be achieved. Enforcing safety rules through discipline and conducting health and safety inspections regularly by investigating all accidents and near misses, and by having a system in place for letting employees notify management about hazardous conditions.

### **2.4 Reasons for Unsophisticated Usage of HRMIS**

Reasons for this low level usage have been thought to stem from various factors in the environment of an HR department such as organizational size, HRMISs time in use, culture, strategy, power and politics and IT skills have all been examined in the past.



Broderick and Boudreau (1992) hypothesized that HRMIS system usage was determined by human resources strategy, and described a matching process between different strategies and different system usage. They report that where strategies were to reduce cost, a transaction system based on computerization of simpler HR administration resulted. This corresponds to the unsophisticated uses described by Martinsons and characterizes the majority of reported UK use to date. A quality based strategy matched an expert systems approach (Martinsons, 1996), whilst decision support systems match an innovation strategy.

Other than the strategy adopted by a HR department in its use of IT in HRM, the duration of time a firm has been using a HRMIS is also regarded as influencing the type of use. The Institute of Employment studies/ Institute of Personnel Development (IES/IPD, 1998) suggested that an important determinant of the respondent's usage of their system was the length of time they had been using it, finding an inverse relationship between system use time and user satisfaction.

The third factor that may explain the use of HRMIS is size of an organization. A relationship between organizational size and HRMIS usage was first identified by Hall and Torrington (1986). Despite a focus on the larger organization Thaler-Carter (1998) observes that there may be two fundamental differences between the smaller organization purchasing a HRMIS, and the larger firm relate to costs and risks. They argue that a small firm would not be able to afford and would not necessarily need the complexity of the large enterprise resource planning (ERP) systems such as Peoplesoft or SAP.

Further, with regard to risk, they note that it is more pervasive as the small firm may find it more difficult to absorb downtime, training time and teething problems associated with implementing new software. Thus, according to Thaler-Carter's evidence the smaller firm would be more cautious in the system it adopted, and thus take longer to develop more sophisticated uses of the information it produces. Size and use time are thus directly implicated in usage outcomes for small businesses.

This argument is also supported by Martinsons (1994), who found that in Hong Kong and Canada, HRMISs were significantly more common in larger companies than smaller ones, although given the rise in affordable technology and the explicit marketing of HRMIS at the small business sector, this scenario may have changed.

The fourth factor that may determine HRMIS usage relates to cultural context in which the HR manager utilized HRMIS. The influence of more complex contextual factors on HRMIS usage was investigated by Kossek *et al.* (1994) and Kinnie and Arthurs (1996). Kossek *et al.*, in arguing that HRMIS use produced and reproduced HRMIS use culture, identified four distinct, pervasive and empirically grounded cultural views of HRMIS usage.

The first, termed, computer jock phobia, referred to the tendency for mainstream HR practitioners to glorify the HR department's computer guru (Torrington and Hall, 1989), and hence justify the non-acquisition of HRMIS skills for themselves. The second category of HRMIS use culture, termed gradual automators, is use of HRMIS is characterized by the time and efficiency savings in computerization of the HR function, which also refers to the type of observed usage in the UK.

Thirdly, the HRMIS usage culture referred to as corporate HRMIS resistors, represents users who claim ignorance of HRMIS, and finally the usage culture, termed as information brokers, which conformed to the type of roles for HR envisioned by Wiley (1992) and Torrington and Hall (1989), were the most advanced usage culture identified in the literature.

The results in the work by Kossek *et al.*, (1994) complements Kinnie and Arthurs's (1996) work which notes the significance of other contextual factors such as departmental structure, in the presence of an HR director, power and politics, referring to the HR department's holding of key information, and its pursuit of a cost reduction strategy to satisfy business aims, and HR practitioners' IT skills, confirmed by Haines and Petit, 1997 as enabling factors in HRMIS usage *per se*. In the light of the above, the following section provides a critical synthesis of the literature and distills it into a theoretical framework that guides the study.

## **2.5 Conceptual framework and Construct Operationalisation**

The previous sections reviewed literature pertinent to the study. From the literature review, the understanding of the researcher on causal relationship among the variables considered in this study may be summarized in Figure 2.1.

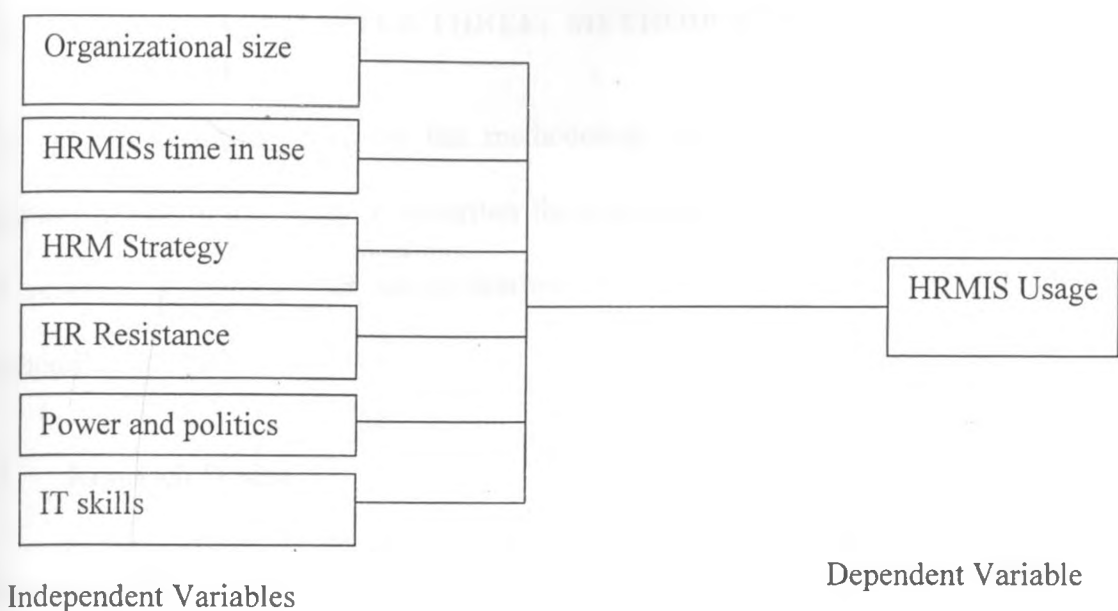


Figure 2.1 Conceptual Framework- Researcher representation of variables to show relationships

As the conceptual framework depicts, the extent and kinds of use of HRMIS is a function of organizational size, HRMISs time in use, culture, strategy, power and politics and IT skills.

The current chapter reviewed literature that informs the study and the choice of methodology. Chapter three outline the methodology adopted to attain the objective of the study.

## CHAPTER THREE: METHODOLOGY

The current chapter focuses on the methodology proposed to answer the research questions posed in this study. It describes the population of interest, the sampling plan, the research instrument, its administration and the data analysis and presentation methodology.

### 3.1 Research Design

The current study used a survey design to establish the utilization of HRMIS among SME's in the manufacturing sector in Kenya. This design is deemed appropriate owing to the exploratory nature of the study. The objective of the study is to describe the extent of use of HRMIS for operational, tactical and strategic purposes in the HRM department, and to establish the perceived reasons for the manifested usage.

### 3.2 Population

The population of interest consists of all Human Resource Managers in SME's that are members of KAM and operate within Nairobi and its surroundings. The list of all members was obtained from the KAM website, which maintains an online directory of all members. From the current figure of 450 members according to KAM directory (2003), the researcher obtained employee figures, from KAM's offices on Mwanzi Rd, Off Peponi Road in Westlands, Nairobi to determine the number of SME's. For purposes of the study the SME definition from the World Bank was adopted and any company which had more than 300 employees was excluded from the study, and only 150 qualified as SME's.

This population is of interest because of several reasons. First, the SME's is regarded as an important sector in regard to the creation of employment in both developing and developed countries. Second, their anticipated role within the current strategy to industrialize Kenya by the year 2030 makes their contribution, given their potential to create be innovative, within the manufacturing sector, a sector worth studying. Finally, the advances in ICT that have made it possible to develop user friendly, flexible, cost effective HRMIS makes their adoption by SME's possible. Thus a survey of SME's in the manufacturing sector may shed light on the extent of use of HRMIS that are today regarded as the vehicle for mainstreaming the role of HR in organizational success.

### **3.3 The sample design**

The study proposed to use a stratified simple random sampling approach to determine the respondent firms as stipulated by Mugenda (2003). From the population of 450 firms that are members of KAM, the study selected 150 SME's that were stratified by their sectors within the manufacturing and allied industries sub sector.

The sub sectors included building, construction, and mining, chemical and allied, consultant and industrial service, energy, electricity and electronics, food beverages and tobacco, leather products and footwear, metal and allied, paper and paperboard, pharmaceutical and medical, textile and apparels, and timber, wood products and furniture. A representative sample of 50 SME's was selected randomly from an alphabetic listing of all the 150 SME's.

### 3.4 Data collection

The current study relied on primary data by respondents answering questions posed in the study. The instrument that was used is a questionnaire administered to various key personnel in HR department. It consisted of three parts. Part I required respondents to provide demographic data about the manufacturing sub sector, the number of employees, whether the firm is using a HRMIS, and the length of time it has used the HRMIS.

Part II focused on the kinds of information stored in the HRMIS, the extent to which the HRMIS supports operations, tactical and strategic roles in HRM. Part III sought to establish the perceived importance of various factors that explain the use of HRMIS in organizations, derived from the literature on HRMIS use, in explaining the use of HRMIS among SME's in Kenya.

The questionnaire was semi structured with open ended questions that permitted a greater depth of response. This also helped to capture greater insight in the feelings, background, hidden motivation, interest and decisions. Hence, provide the respondents with much needed flexibility while answering the stated questions. It will also consist of closed questions that will make it easier for the respondents to answer and give the specific response. This will also help in isolation of external influences and thus respondents give their views in unbiased manner. For the closed questions likert scale will be provided and respondents indicate by marking the appropriate answer. The instrument was administered personally by the researcher to the 50 respondents who were included in the sample.

The address and telephone numbers of the HRM managers of the firms was obtained from KAM and appointments were made to secure an opportunity to interview the respondents.

This would give the researcher an opportunity to clarify any issues that may arise in the course of completing the questionnaire. Where it was impossible to secure appointment, the questionnaire was dropped with a request that it be completed in within one week so that the researcher would pick it up, on the next visit.

### **3.5 Data Analysis**

This being an exploratory study the researcher used descriptive statistics to analyze and present the findings of the study. The use of percentages, means, standard deviations and mode will provide the required measures of summary to reduce the data from the 50 respondents in to a meaningful form.

Frequency table, bar charts, pie charts, were used to present the findings on the percent of firms that had a HRMIS, the length of time they had used the HRMIS, types of data stored in the HRMIS, the frequency of use of various kinds of modules, within the HRMIS, at the operational, tactical and strategic HR levels, the HR functions supported by the HRMIS, and the respondents perception of the relative importance of the various factors that influence the apparent usage of HRMIS in their organization.



## CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

This chapter presents the data findings about the utilization of HRMIS among SMEs in the Manufacturing sector. The demographic data on respondent positions, size of SMEs, the subsector of operation are presented as a basis for interpreting the findings on the use of HRMIS to support HR functions and the reasons for the current usage patterns. The means, percentages and frequencies are presented as background and basis for further inferences.

### 4.1 Demographic Data

As stated earlier in section 3.2 of chapter 3, the questionnaire included demographic information needed to assess the respondents' position in the field of HR, or otherwise and whether they used computers in processing HR related data. Questions 1 and 2 were asked in that effect. Respondents were asked, "What is your position or title in the firm?", and "please indicate whether your firm uses computers to process information relating to human resources?"

It was expected that the respondents holding the positions in HR or Information Technology were more likely to provide more reliable information on questions on utilization of HRMIS. More so, the position or title in the questionnaire was to determine the authority of the respondents in the field under study.

#### **4.1.1 Survey Questionnaire Response Rate**

The survey used simple random sampling to select 50 small and medium manufacturing firms from a population of 150 in a list of small and medium manufacturing companies registered by the Kenya Association of Manufacturers. The researcher administered the instruments, where the respondents were available to complete the instrument.

Where the informants could not provide an immediate response, the drop and pick method was used. A total of 50 questionnaires were administered, out of which 29 usable questionnaires were returned all of which were analyzed generating a 58 per cent response rate.

This rate compares favorably with previous studies such as Tiren (2006) who reports a response rate of 52% in an investigation of the use of HRMIS within the banking industry in Kenya. In the current study, the use of drop and pick method and a personalized letter to the respondents explaining the purpose of the study and its usefulness to the HR professional in manufacturing industry improved the response rate.

#### **4.1.2 Users of HRMIS Applications**

The survey questionnaire was administered to the Users of HRMIS in small manufacturing organizations within the Nairobi chapter of the Kenya Association of Manufacturers.

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The profile of informants is presented in Table 4.1.

Designation	Frequency	Percent	Valid Percent	Cumulative Percent
Human Resource Manager	2	6.9	6.9	6.9
Human Resource Officer	11	37.9	37.9	44.8
IT Specialist	2	6.9	6.9	51.7
Accountant	7	24.1	24.1	75.9
Others	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 4.1 Role or Title of Respondents

The profile suggests that SMEs in the manufacturing sector do not have established HR departments and users of computers for HR related functions were spread across the firm.

Table 4.1 which profiles the respondents with a HR and Non HR designations shows that in almost 51 percent, HRMIS functions were carried out by officers who did not have HR designations. It was observed that in 24 percent of these small firms accountants, who were also served in administrative capacities, were responsible for HRMIS functions. Table 4.2 presents a profile of the 7 percent respondents, in the others category in Table 4.1, that were neither had HR, IT or Accountant designations.

Designation	Frequency	Percent	Valid Percent	Cumulative Percent
Administrative officer	2	6.9	6.9	82.8
Auditor	2	6.9	6.9	89.7
Chief Executive Officer	1	3.4	3.4	93.1
Planning Officer	1	3.4	3.4	96.6
Technician	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 4.2 Position of Non-HR Respondents

The data in Table 4.2 shows further to the results in Table 4.1 that HR functions in small manufacturing firms are carried out by various officers, including CEOs. In the current study, the respondents who operated the HRMIS that had no HR orientation represented 7% of the informants.

The findings in Tables 4.1 and 4.2 are consistent with results from previous studies which seem to suggest that an organization's HRIS meet the needs of a number of organizational stakeholders.

Typically, the people in the firm who interact with the HRIS are segmented into HR professionals, managers in functional areas of production, marketing, engineering, finance, and employees (Anderson, 1997).

#### **4.1.3 Use of Computers to Process HR Information**

The focus of the study was on utilization of computers in HR functions. The respondents were asked whether they used computers to process information relating to HR functions.

Figure 4.1 presents the proportion of informants who use computers in HR.

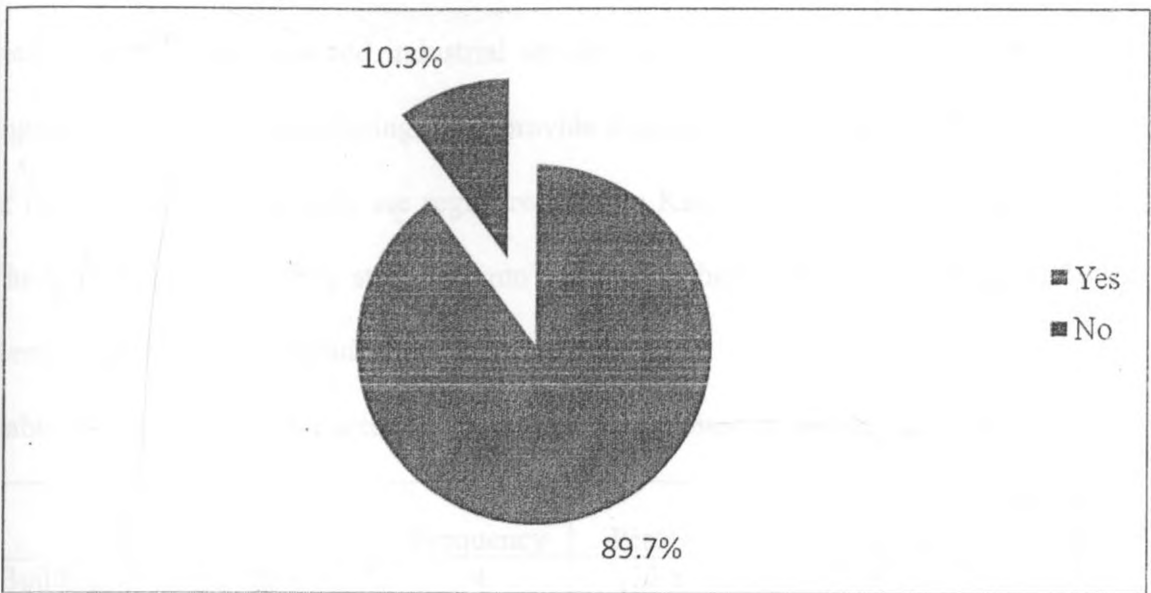


Figure 4.1 Informants Using Computers in HR.

The Figure shows that nearly 90 percent of the respondents surveyed in this study were users of computer for various HR tasks in the manufacturing subsectors they represented.

#### 4.1.4 Size and Sub-Sectors of SMEs

To provide an appropriate sampling frame, the study adopted the World Bank definition of SMEs as firms with less than 300 employees. Table 4.3 provides data on the size of firms surveyed.

	Frequency	Percent	Valid Percent	Cumulative Percent
1 - 50	16	55.2	55.2	55.2
51 - 100	3	10.3	10.3	65.5
151 - 200	2	6.9	6.9	72.4
201 - 250	3	10.3	10.3	82.8
251 - 300	5	17.2	17.2	100.0
Total	29	100.0	100.0	

Table 4.3 Size of SMEs Surveyed

The data in Table 4.3 shows that the majority of the small and medium manufacturing firms employ between 1 to 50 employees. The firms that had over 200 employees were mainly in the consultant and industrial service sub sector. These firms, although not engaged in actual manufacturing, they provide essential services that facilitate activities of manufacturing firms and, are registered by the Kenya Association of Manufacturers. The respondent firms were stratified into sub sectors based on the classification by the Kenya Association of Manufacturers.

Table 4.4 shows the manufacturing sub-sectors represented by the respondents.

	Frequency	Percent	Valid Percent	Cumulative Percent
Building and Construction	4	13.8	13.8	13.8
Commercial and Allied	2	6.9	6.9	20.7
Consultant and Industrial Service	10	34.5	34.5	55.2
Energy, Electricity and Electronics	3	10.3	10.3	65.5
Food, Beverages and Tobacco	1	3.4	3.4	69.0
Metal and Allied	2	6.9	6.9	75.9
Pharmaceutical and Medical	3	10.3	10.3	86.2
Textiles and Apparels	1	3.4	3.4	89.7
Timber, Wood Products and Furniture	3	10.3	10.3	100.0
Total	29	100.0	100.0	

Table 4.4 Sub-Sector of Manufacturing SMEs

The result in table 4.4 shows that just over a third of the firms provided support services in consultancy and industrial services. The manufacturing firms, in the small and medium industries category, about 14 percent were in building and construction while the energy and electricity/electronics, timber and wood products, and pharmaceutical and medical sub-sectors each had slightly over 10 percent.

## **4.2 Utilization of HRMIS among Small and Medium Manufacturing Enterprises**

This being an exploratory study, data on their use of HRMIS for the various functions, the type of data stored, and inhibitors to adoption of HRMIS collected was collected, analyzed and presented using descriptive statistics. The tables, pie charts and bar graphs in this section show the extent of HRMIS use in operational, tactical, and strategic HR roles within manufacturing firms in Kenya's SME sector.

### **4.2.1 HRMIS Usage for HR Functions**

Information technology is now used in several HRM processes. These processes include appraisal, attitude surveys, career counseling, development programs, computer aided interviews, computerized job evaluation, managerial assessment, recruitment, training and performance analysis (Dessler, 1997). To establish the HR functions for which most of the respondents firms used computerized systems the question "Is there electronic information storage and usage for the following HR functions?" was asked. Table 4.5 presents the frequency of use of HRIS in the HR functions of manufacturing SMEs surveyed.

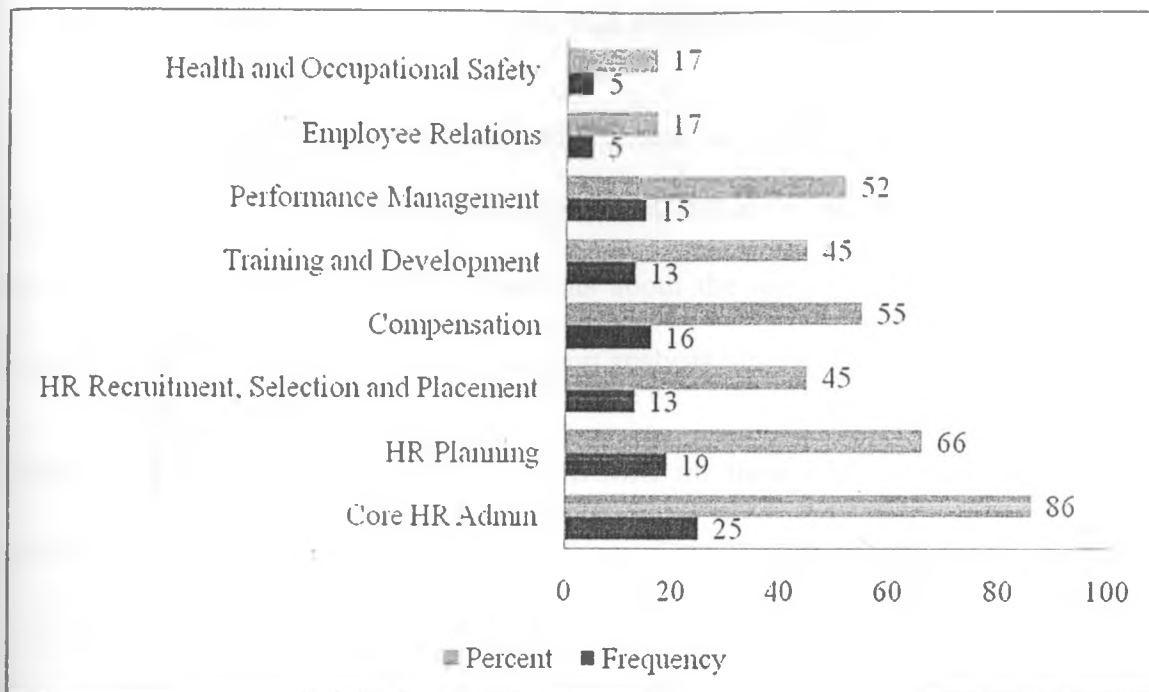


Figure 4.2 HRIS Usage for HR Functions

The data in Figure 4.2 shows that 86 percent of SMEs in the manufacturing sector use HRMIS to support core HR administrative functions. This may suggest that respondents use of HRMIS may be in support of traditional personnel administrative functions and less for more analytical tasks. The use of HRIS for personnel administrative tasks suggests that the SMEs are in the initial stages of their use of HRMIS. Surveys on use of HRMIS for HR functions report similar sophistication in use of HRMIS.

Survey results have consistently demonstrated the unsophisticated use of HRMIS output by HR practitioners. For instance, Hall and Torrington's (1986) found that most organizations they surveyed were using IT as a workhorse of the personnel function, easing the administrative burden of record keeping and pay administration, rather than for forecasting, analysis and supporting decision making. Empirical reports since then have indicated that little has changed (Kinnie and Arthurs, 1996; IES/IPD, 1997, 1998, 1999).



### 4.2.3 Use of HRMIS for Administrative and Analytical Decision Support

To establish whether firms used HRMIS for their core HR functions of personnel administration and analytical decision support respondents were asked “To what extent do you agree with the following statements about the use of computers in core HR functions of personnel administration / support analysis for decision making?.

Table 4.5 provides the extent of use of HRMIS for these administrative or decision support functions.

	HR Administration		Analytical Decision Support	
	Frequency	Percent	Frequency	Percent
Strongly Agree	17	58.6	5	17.2
Agree	8	27.6	18	62.1
Neutral	1	3.4	2	6.9
Disagree	1	3.4	1	3.4
Strongly Disagree	2	6.9	3	10.3
Total	29	100.0	29	100.0

Table 4.5 SMEs use of HRMIS for Administrative and Analytical Decision Support

The data in Table 4.5 suggests seem to suggest that HRMIS is used mainly for administrative support and less for support analysis for decision making. The data shows that while almost 60 and 17 percent of respondents strongly agree that HRMIS is used for administrative support and analytical decision support respectively. On the other hand, approximately 10 and 14 percent respectively “disagree” that HRMIS is used for HR administration and analytical decision support. This may be interpreted to mean that almost 90 percent of respondents “agree” that HRIS is used for administrative purposes.

The results in Table 4.5 supports previous findings that suggests that HRMIS is used first for administrative purposes and secondly for analytical decision support.

For instance Kovach and Cathcart (1999) notes that a HRMIS could be used, first, for administrative purposes to reduce costs and time and, second, for more analytical decision support.

#### 4.2.4 Types of Information in SMEs HRMIS

To establish whether SMEs use of HRIS was sophisticated or not the survey sought to find out the types of information held in the SMEs HRIS. It is presumed that where a high proportion of respondents held unsophisticated data, such as employment details, salary, and position then they were not sophisticated in their HRIS. Further, data on employee relations was viewed as sophisticated. Accordingly, the respondents were asked to “State whether their HRMIS held information on employment, salary structure, job position and employee relations”. Table 4.6 presents the types of data held in SMEs HRMIS.

	Yes		No	
	Frequency	Percent	Frequency	Percent
Current Employment Details	26	89.7	3	10.3
Salary Structure	21	72.4	8	27.6
Jobs and Positions	20	69.0	9	31.0
Employee Relations	5	17.2	24	82.8

Table 4.6 Types of Information held in SMEs HRIS database

Data in Table 4.6 shows that to suggest that 90 percent of respondents report holding data on employment details, almost 73 percent on salary structure, and about 70 percent

on job positions. On the other hand only about 18 percent of respondents reported holding data on employee relations.

The results may be interpreted to mean that SMEs in the manufacturing sector used their HRMIS to process more of payroll data and less of data on sophisticated processes like employee relations.

Previous work have sought to establish the level of sophistication of a HRMIS by examining the kind of electronic records held, these being an indication of the sophistication of the implied automation.

For instance, Martinsons (1994) classifies HRMIS usage according to its degree of sophistication, arguing that payroll and benefits administration, and the keeping of employee and absence records electronically was unsophisticated, because of its electronic replication of the contents of the HR department's filing cabinet, and are best described as simple minded automation. In this study, data in Table 4.5 on the type of information held in the HRMIS database of SMEs seems to suggest that their usage of HRMIS is unsophisticated.

#### **4.2.5 Importance of HR Planning and Medical Information**

HRMIS usage for tasks such as planning are characterized as sophisticated because the HRMIS must generate information to provide support for decisions that involve expert judgment and more advanced manipulation (Martinsons, 1994). To establish whether Usage of HRIS in SMEs was sophisticated the survey posed the question "To what extent do you consider maintaining information about HR planning and Employee medical information important". It was expected that the responses would inform the survey about

the usage of HRIS for planning purposes, a higher order analytical task, and maintaining employee medical records, that represents a lower order analytical task.

The responses on how important information for these two HR functions of planning and record keeping is presented in table 4.6.

	Planning Information		Medical Information	
	Frequency	Percent	Frequency	Percent
Very Important	14	48.3	16	55.2
Important	9	31.0	8	27.6
Don't Know	3	10.3	1	3.4
Unimportant	0	0	1	3.4
Very Unimportant	3	10.3	3	10.3
Total	29	100.0	29	100.0

Table 4.7 Importance of HR Planning and Medical Information

The data in Table 4.6 indicates that almost 80 percent regard maintaining planning information important while 83 percent of those surveyed view medical information as being important to maintain. On the other hand while almost 14 percent view medical information as being unimportant, about 11 percent view planning information as being unimportant.

Perhaps the conflicting data reflects the possibility of respondents not being clear about information regarding planning as evident from over 10 percent who don't know whether planning information is important. On the other hand only 3 percent of respondents seem not to know whether medical information is important. Thus given that the item on medical information seems to have been better understood it may be presumed that since

a higher percentage of respondents' regarding medical information as important than planning is less viewed as important by respondents.

It can be inferred from the data in Table 4.6 that respondents perhaps use the HRMIS less for tasks such as planning, and more for tasks like medical recordkeeping. As pointed out by (Martinsons, 1994) such usage is characterized as less sophisticated since the HRMIS usage does not involve the generation of information to provide support for decisions that involve judgment and more advanced manipulation.

#### 4.2.6 Information for Recruitment, Training and Performance Management

The survey sought to further find out if the HRIS of manufacturing SMEs held information on recruitment, training and employee performance in order to establish if usage of HRMIS focused on employee training and performance monitoring. Table 4.7 presents the response to the question "s your organization holding electronic information for recruitment, planning or performance management?"

	Recruitment		Training		Performance Management	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	14	48.3	16	55.2	14	48.3
No	15	51.7	13	44.8	15	51.7
Total	29	100.0	29	100.0	29	100.0

Table 4.8 Information for Recruitment, Training and Performance Management

The responses in Table 4.7 seem to suggest that over 55 percent of respondents report that their HRMIS hold information for training and less than 50 percent say they hold data for recruitment or performance management.

From this data it may be inferred that since more SMEs in the manufacturing sector hold training information, their HRMIS are more utilized for the training function than performance management and recruitment purposes.

#### 4.2.7 Frequency of usage of HRMIS by SMEs in the Manufacturing Sector

The data in sections 4.2.1 through 4.2.6 sought to establish the use of HRMIS, in the various functional areas, by making inferences from the nature of data HRIS data held and sophistication of usage for higher level or routine tasks. The responses in section 4.2.7 focus on the frequency of HRMIS usage, for recruitment and training related tasks, by SMEs. Respondents were asked to rate the frequency of use of HRMIS for these tasks on a five point likert scale. Figure 4.3 presents the mean frequency of HRMIS usage for recruitment and training tasks by SMEs.

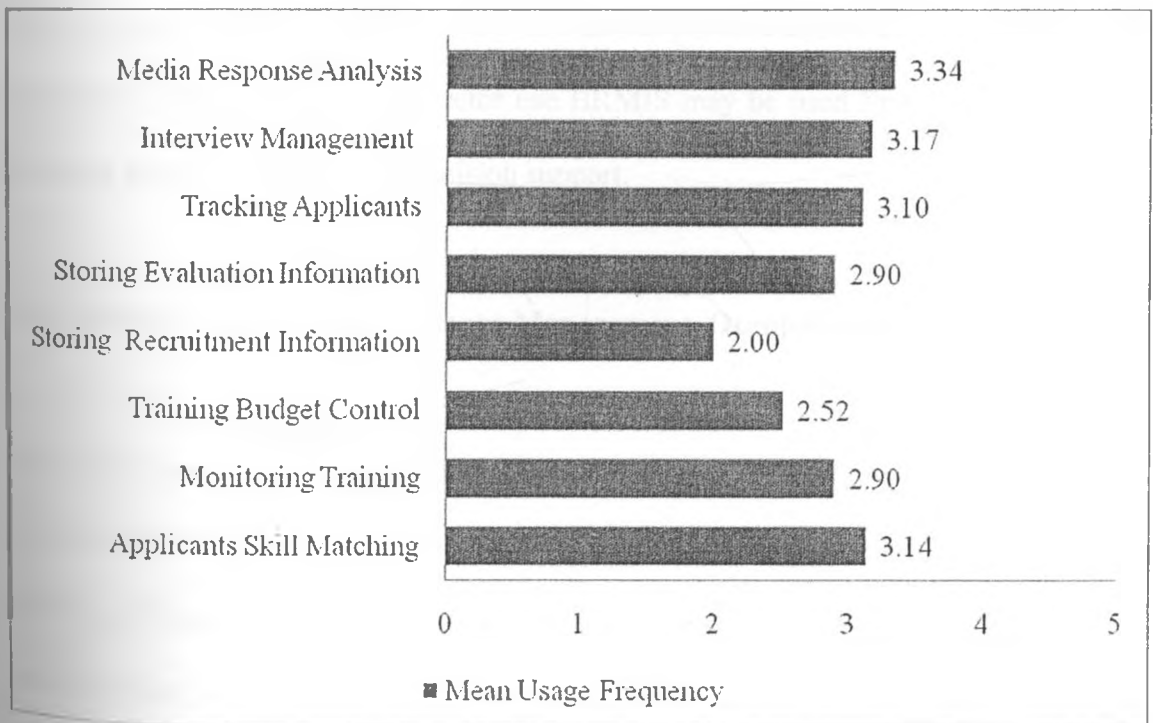


Figure 4.3 Mean HRIS usage frequency in Training and Recruitment Tasks

The data in Figure 4.3 shows rated use of HRMIS for at a mean HRMIS usage frequency of 2.0 and 2.5 for storing recruitment information and training budget control respectively. This can be interpreted to mean that that small and medium manufacturing firms use HRMIS “infrequently” for storing recruitment and training budget information. The respondents rating of the remaining at a likert mean HRIS usage frequency of, approximately 3.0, meaning “don’t know” may suggest that the respondents are unsure of how frequently their firms use HRMIS for monitoring training, tracking applicants, applicant skills matching, interview management, and Media response analysis.

This result is not surprising given that these features, as pointed out by previous work obtain in sophisticated HRIS applications, yet the data from the current survey in Table 4.5 showing that almost 60 percent “strongly agree” that HRMIS is used for administrative purposes while only 17 percent “strongly agree” that is used for analytical decision support. Thus it may be concluded that as Kovach and Cathcart (1999) suggest, the SMEs in the manufacturing sector use HRMIS may be used first for administrative purposes and less for analytical decision support.

#### **4.2.8 HRMIS Usage for Performance Management, Occupational Health and Safety**

The survey sought to further examine the nature of administrative uses of HRMIS, other than for recruitment and training. In particular, it sought to establish if the HRMIS was used for personnel functions of performance contracting and management as well as issues relating to health and occupational safety. Respondents were asked to “indicate whether they used HRMIS software in these areas of personnel management”.

Table 4.9 summarizes the responses on use of HRMIS for performance management and health and occupational safety.

	Performance Contracting		Performance Management		Health and Occupational Safety	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	11	37.9	15	51.7	1	3.4
No	17	58.6	14	48.3	28	96.6
Total	29	100.0	29	100.0	29	100.0

Table 4.9 Utilization of HRMIS for Employee Performance, Health and Safety

The data in Table 4.9 shows that 97 percent of the respondents agree that HRIS is not used for occupational health and safety issues, while only 38 percent and 52 percent agree that it is used for performance contracting and performance management respectively. The findings relating to use of HRIS for performance management correlate with the data in Table 4.7 that reveals that 48 percent of respondents reported holding electronic information for performance management.

### 4.3 Integration of Personnel Applications with HRIS Personnel Databases

The findings in sections 4.2 focused on the extent of usage of HRIS in small and medium manufacturing firms. The survey further sought to establish whether these firms had the HRMIS functionality required of effective utilize computers for HR functions.

To survey whether the SMEs had the requisite HRIS functions respondents were asked to "indicate whether their HRIS integrated applications such as time and attendance, payroll, health and safety, benefits, training and performance appraisal with their



personnel database”. Table 4.10 presents the results on integration of personnel applications with HRIS databases.

	Payroll Application		Health and Safety Application		Benefits Application		Training Application		Performance Appraisal Application	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	24	82.8	2	6.9	20	69.0	15	51.7	17	58.6
No	5	17.2	27	93.1	9	31.0	14	48.3	12	41.4

Table 4.10 Integration of Personnel Applications with HRIS databases

From the data in Table 4.9 only 7 percent of respondents reported that their health and safety applications are integrated with HRMIS databases. On the other hand, almost 83 percent of respondents indicated that their payroll applications are integrated with the HRMIS database. The respondents reporting that their personnel applications for benefits administration, training and performance appraisal were 70 percent, 52 percent and 59 percent respectively.

This could be interpreted to mean that the level of integration for personnel administrative applications were higher than for non-routine applications such as those for employee health and occupational safety.

This result corroborates the data in Table 4.8 which shows that only 3 percent if respondent firms use HRMIS for health and occupational safety. Further, they may suggest that most firms do not use advanced features of their HRMIS.

#### 4.4 Features of HRMIS used by SMEs in the Manufacturing Sector

Personnel Information Systems have evolved from the automated employee recordkeeping from the 1960s into more complex reporting and decision systems of late (Gerardine, 1986: 15).

To establish the HRMIS features of the firms included in the survey, the respondents were asked to “State whether their HRMIS posses and use information management features such as screen customization, online help, data security, data import and export, scanning and imaging, diary, information analysis, salary modeling and report generation”. Figure 4.5 shows the features of HRMIS used by small manufacturing firms.

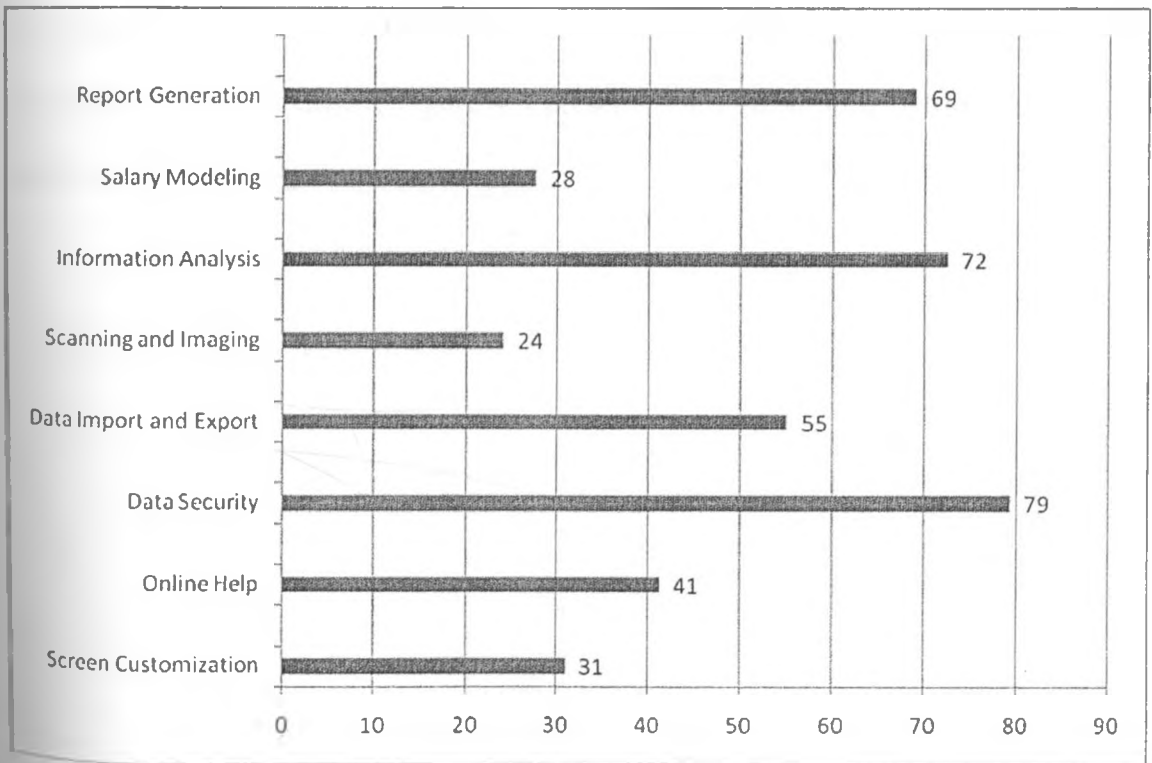


Figure 4.4 Features of HRMIS used by Small and Medium Manufacturing Firms

Data in Figure 4.4 shows that while 79 percent of respondents report their HRMIS had data security features, 72 percent possess information analysis features, 69 percent possess report generation features while 55 percent had data import and export features. The features that the HRMIS possessed least included scanning and imaging, 24 percent, salary modeling, 28 percent, and screen customization, 31 percent. The data may suggest that the HRMIS lack features that may make it easy for various users to quickly master their use such as online help and screen customization features.

#### **4.5 Utilization of HRMIS Features by SMEs in the Manufacturing Sector**

To determine whether the features possessed by the HRMIS were used by the small and medium manufacturing firms, respondents were asked to “State whether they used features such as screen customization, online help, data security, data import and export, scanning and imaging, diary, information analysis, salary modeling and report generation, possessed by their HRMIS”. Figure 4.5 presents the utilization of HRMIS features by small and medium manufacturing firms.

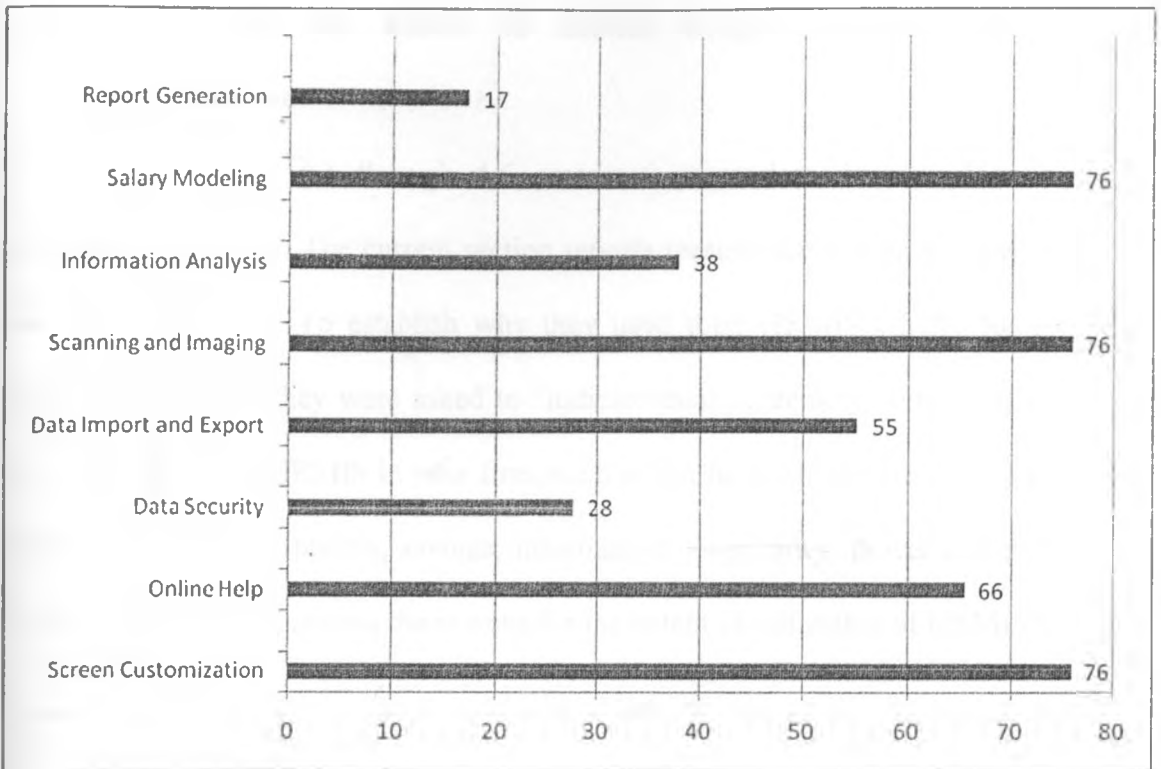


Figure 4.5 Utilization of HRMIS features by Small and Medium Manufacturers

The data in Figure 4.5 shows that 76 percent of the respondents use screen customisation, scanning and imaging, and salary modelling features of their HRMIS.

The least used feature according to the respondents is the HRMIS report generation features, followed by data security and information analysis features.

The apparent low usage of reporting features and data analysis features points at a possible inability of users to use advanced features of the HRMIS to support analytical decision making. On the other hand the high frequency in use of scanning and imaging features, salary modelling and screen customisation features may be interpreted to mean that users are comfortable with using the HRMIS for routine personnel administrative tasks.

#### 4.6 Reasons for the Extent of HRMIS Usage by Small and Medium Manufacturers

The data in section 4.1 through 4.6 presented respondent demographics and their utilization of HRMIS. The current section reports reasons users cited for their extent of use of their HRMIS. To establish why they used their HRMIS chiefly for personnel administrative tasks they were asked to “indicate their agreement with explanations for the current usage of HRMIS in your firm, such as the firms HR strategy, age of HRMIS, firms’ size, computer phobia, savings, information consultancy, power and politics and IT skills”. Figure 4.6 presents the reasons for the extent of utilization of HRMIS by firms.

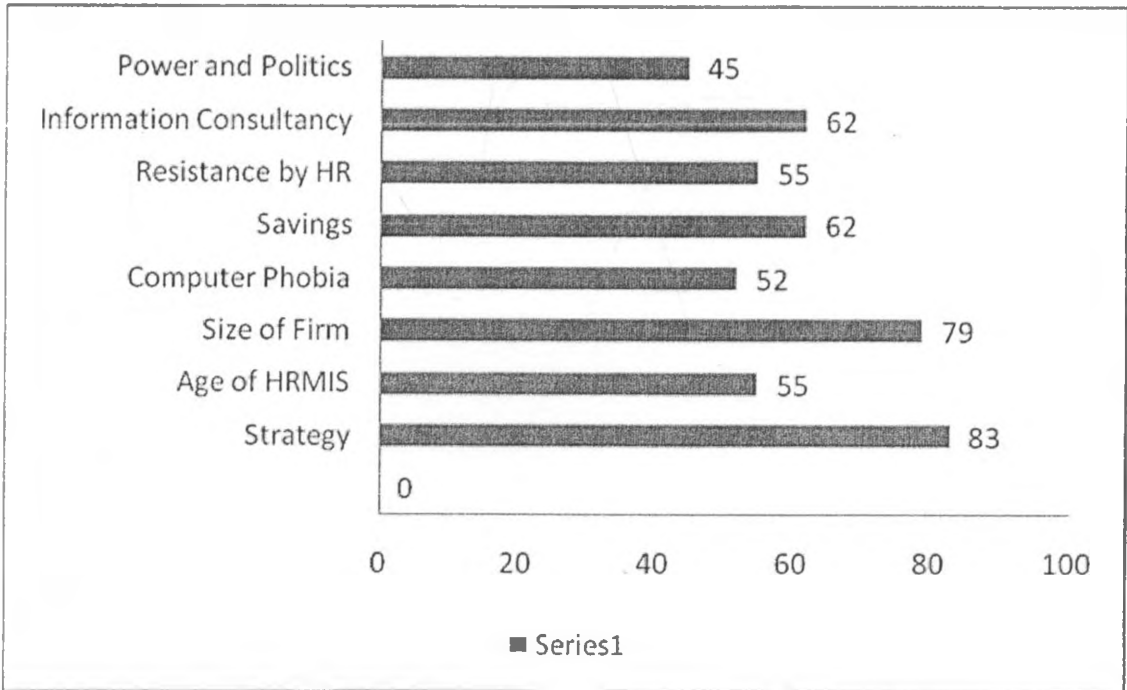


Figure 4.6 Reasons for extent of utilization of HRMIS

The data in Figure 4.6 suggests that lack of a HR strategy was the most cited reasons for the current utilization of HRMIS among small and medium manufacturing firms surveyed. Respondents further reported that their size was an important reason for their

apparent utilization of HRMIS. Power and politics was regarded as least important.

Chapter 5 provides a summary of the findings in this chapter and concludes the study.

## CHAPTER FIVE: SUMMARY AND RECOMMENDATIONS

The current chapter provides a summary of the main findings on the utilization of HRMIS among small and medium firms in Kenya's manufacturing sector. These provide a basis of the conclusions and recommendations of the study.

### 5.1 Summary of Findings

The objective of the study was to determine the extent of utilization of HRMIS among small and medium firms in Kenya's manufacturing sector. From a list of 450 firms who are members of the Kenya Association of Manufactures, a simple random sample was drawn from the 150 small and medium firms.

Survey data indicated that SMEs in the manufacturing sector do not have established HR departments and users of computers for HR related functions were spread across the firm. In particular, almost 51 percent, HRMIS functions were carried out by officers who did not have HR designations. It was observed that in 24 percent of these small firms accountants, who were also served in administrative capacities, were responsible for HRMIS functions. However, the respondents who operated the HRMIS that had no HR orientation represented 7% of the informants. Overall nearly 90 percent of the respondents surveyed in this study were users of computer for various HR tasks in the manufacturing subsectors they represented. The majority of the small and medium manufacturing firms employs between 1 to 50 employees. The firms that had over 200 employees were mainly in the consultant and industrial service sub sector.

The results on the HR functions for which HRMIS were used by respondents suggest that 86 percent use HRMIS to support core HR administrative functions, suggesting the use of HRMIS for support of traditional personnel administrative functions and less for more analytical tasks. The use of HRIS for personnel administrative tasks suggests that the SMEs are in the initial stages of their use of HRMIS.

The types of information held in HRMIS of respondent firms consisted mainly of data for personnel administrative tasks. For instance, while only 18 percent reported holding data on employee relations, 90 percent of respondents report held data on employment details, 73 percent on salary structure, and 70 percent on job positions. Further, over 55 percent of respondents report that their HRMIS hold information for training and less than 50 percent say they hold data for recruitment or performance management. Also the frequency of use HRMIS showed that almost 60 percent “strongly agree” that HRMIS is used for administrative purposes while only 17 percent “strongly agree” that is used for analytical decision support. Thus the utilization of HRMIS among SMEs in the manufacturing sector was more for automation of administrative tasks than for support of analytical decision making.

The data further shows that while utilization of HRMIS extended to employee performance, occupational health and safety, 97 percent of the respondents agree that HRIS is not used for occupational health and safety issues. On the other hand, only 38 percent and 52 percent agree that it is used for performance contracting and performance management respectively.



On the extent of integration of personnel applications with the HRMIS database, 83 percent of respondents reported that their payroll applications are integrated with the HRMIS database. The respondents reporting that their personnel applications for benefits administration, training and performance appraisal were 70 percent, 52 percent and 59 percent respectively.

The key features of the HRMIS of the respondent firms' shows that while 79 percent of respondents report their HRMIS had data security features, 72 percent had information analysis features, 69 percent had report generation features while 55 percent had data import and export features. The features that the HRMIS possessed least included scanning and imaging, 24 percent, salary modeling, 28 percent, and screen customization, 31 percent. The least used feature according to the respondents is the HRMIS report generation features, followed by data security and information analysis features.

The data on reasons for the apparent level of utilization of HRMIS by SMEs surveyed suggests that lack of a HR strategy was the most important reason. The next often cited cause was size while the least cited one was power and politics. This study focused on the extent of use of HRMIS in HRM by manufacturing firms in Nairobi. The objective of the study is to establish the HRMIS utilization in HRM by SME in manufacturing industry.

## 5.2 Conclusions

The objective of the study was to establish the utilization of HRMIS among small and medium manufacturing enterprises in Nairobi Kenya. The findings indicate that the use of HRMIS by SMEs is picking up well. Information systems use in Kenya as compared to other countries in a recent development according to Torrington (1989), the link between human resources development and Information Systems undergoes four stages namely stars, the radicals, the plodders and beginners.

The utilization of HRMIS by SMEs can be said to have undergone the same process. The data seems to suggest that a good percentage of SME in Kenya may be classified in the radical category. That is they do not make full use of computer potential to enhance the role and effectiveness of the personnel management function in the organization. The other sizeable number falls into the category of plodders i.e. they make use of information system but the nature of work remains unchanged.

With functional human resources information system in place, organization can be able to align the individual goals of their employees with their own corporate strategies. The goal of the organization is to optimize their workforce. This can only be achieved only by accurately tracking the performance and movement of the employees within the organization.

According to Dessler (2003) information technology is now used in several HRM processes. These processes include appraisal, altitude surveys, career counseling, development programs, computer aided interviews, computerized job evaluation, managerial assessment, recruitment, training and performance analysis.

This has been corroborated by this study in that the manufacturing firms indicated that they use information system in human resources administration, analytical decision, training,

### **5.3 Limitation of the study**

The study was a success but not without limitations. A recognized limitation of this study is the nature of data collection instrument and procedures. The response rate was not adequate and also the respondents failed to respond to questions adequately. The survey tool was a self report instrument that relied upon the integrity of the respondent. Most of the manufacturing firms do not have human resources management departments and that they are small hence respondents biased information being used in the study. Another challenge was that the number of small and medium manufacturing enterprises in Nairobi is large thus collecting data from all of them to be able to make a conclusive generalization of the study objective was not possible. The time was also limited.

### **5.4 Recommendation for further study.**

These results were drawn from manufacturing firms in Nairobi and its environs, and being an exploratory study, further work is required on the utilization of HRMIS among small manufacturing firms. It may be recommended that a study be done to determine the competencies and capability that are required for effective use of HRMIS in HRM to enhance the competitive advantage of small manufacturing firms in Kenya.

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## Appendix I: Letter to Respondents

Prisca. N. Maina D61/70156/2007,

MBA student, School of Business,

University of Nairobi,

P.O. Box 30197,

Nairobi.

17<sup>th</sup> August 2010.

Dear Sir/Madam,

### **RE: REQUEST FOR RESEARCH DATA**

I am a postgraduate student in the School of Business, pursuing a course leading to the Master of Business Administration (MBA) in Human Resource Management. In partial fulfilment of the course requirements, I am conducting a Management Research Project titled:

**“Utilisation of Human Resource Management Information Systems among Small and Medium Manufacturing Enterprise's in Kenya.”**

You are one of those selected to form part of the study. I kindly request you to assist completing the attached questionnaire the soonest possible and to the best of your knowledge.

The questionnaire is in three parts. Part I is for classification information. Part II dwells on the use of HRMIS in your organisation. Part III focuses on the possible reasons for the extent of use HRMIS in your organisation.

The information you give is purely for academic purposes and will therefore be treated in strict confidence. In no way will your name appear in the final report. A copy of the final report will be made available to you upon request.

Your assistance and co-operation will be highly appreciated.

Thank you,

PRISCA MAINA

Mr. STEPHEN. N.M NZUVE

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MBA STUDENT

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SUPERVISOR

## Appendix II: Research Instrument

### A survey of HRMIS utilization among the Small and Medium Manufacturing Enterprise's in Kenya

The purpose of this study is to determine the extent and type of use of HRMIS in Kenyan SME's

#### PART 1 DEMOGRAPHIC DATA

Please complete the following questions about yourself and the organization use of HRMIS (computer based human resources information system)

1. Position in the firm

- Personnel Manager
- Human Resources Manager
- Human Resources Officer
- IT Specialist
- Non-HR Director
- Accountant
- Others Specify

2. Please indicate whether your firm uses computer to process information relating to human resources Yes  No

3. Number of employees

- 1-50
- 51-100
- 101-150
- 151-200
- 201-250
- 251-300
- Above 300

4. Please indicate which sector best describes your firm by ticking

- Building, construction and mining
- Chemical and allied



- Consultant and industrial service
- Energy, electricity and electronics
- Food beverages and tobacco
- Leather products and footwear
- Metal and allied
- Paper and paperboard
- Pharmaceutical and medical
- Textile and apparels
- Timber, wood products and furniture

PART 2 HRMIS USAGE

This questions in this part seek to establish the extent to which your firm uses computers to acquire, store, manipulate, analyze, retrieve, and distribute information about the organization's human resources

5. Is there electronic information storage and use for the following HR functions

	Yes	No
Core HR administration	<input type="checkbox"/>	<input type="checkbox"/>
Human resources planning	<input type="checkbox"/>	<input type="checkbox"/>
Recruitment, selection and placement	<input type="checkbox"/>	<input type="checkbox"/>
Compensation	<input type="checkbox"/>	<input type="checkbox"/>
Training and development	<input type="checkbox"/>	<input type="checkbox"/>
Performance management	<input type="checkbox"/>	<input type="checkbox"/>
Employee relations	<input type="checkbox"/>	<input type="checkbox"/>
Health and occupational safety	<input type="checkbox"/>	<input type="checkbox"/>

6. To what extent do you agree with the following statements about use of computers in core HR functions in your firm

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Primarily for administrative use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To support analytical decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Please state whether the following types of information is held in the organization's HRMIS

	Yes	No
Current employment details	<input type="checkbox"/>	<input type="checkbox"/>
Organization salary structure	<input type="checkbox"/>	<input type="checkbox"/>
Organizational job and positions	<input type="checkbox"/>	<input type="checkbox"/>
Employee relations	<input type="checkbox"/>	<input type="checkbox"/>

8. To what extent do you consider maintaining information concerning the following HR functions important?

	Very Important	Important	Don't Know	Unimportant	Very Unimportant
HR planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee medical information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Is your organization holding information in the following HR function electronically

	Yes	No
Training	<input type="checkbox"/>	<input type="checkbox"/>
Recruitment	<input type="checkbox"/>	<input type="checkbox"/>
Performance management	<input type="checkbox"/>	<input type="checkbox"/>

If yes indicate to what extent

.....

.....

.....

.....

10. Please rate how frequently the firm uses the HRMIS in the following aspects

	Very Frequently	Frequently	Don't Know	Infrequently	Very Infrequently
Applicant skills matching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training budget control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Store applicant information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Store evaluation information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Track applicants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Media response analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Please indicate whether you used HRMIS software in the following areas of personnel function

	Yes	No
Performance contracting	<input type="checkbox"/>	<input type="checkbox"/>
Performance management	<input type="checkbox"/>	<input type="checkbox"/>
Healthy and occupational safety	<input type="checkbox"/>	<input type="checkbox"/>

12. Please ticking to indicate whether the following application are integrated with the personnel database

Time and attendance	<input type="checkbox"/>
Payroll administration	<input type="checkbox"/>
Healthy and safety	<input type="checkbox"/>
Benefits administration	<input type="checkbox"/>
Training and recruitment	<input type="checkbox"/>
Performance appraisal	<input type="checkbox"/>

13. State whether your HRMIS posses and you are using the following information management features

	Possess		Use	
	Yes	No	Yes	No
Screen customization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Import and export	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scanning and imaging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary modeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Report generator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 14. Part III Reasons for the current extent and type of Use of HRMIS

Please indicate your agreement with the following explanations for the current usage of HRMIS in your firm

The use of HRMIS depends on	Yes	No
Human resources strategy	<input type="checkbox"/>	<input type="checkbox"/>
Duration of time the HRMIS	<input type="checkbox"/>	<input type="checkbox"/>
The size of the company	<input type="checkbox"/>	<input type="checkbox"/>
Computer phobia	<input type="checkbox"/>	<input type="checkbox"/>
Savings in automation	<input type="checkbox"/>	<input type="checkbox"/>
Resistance by HR	<input type="checkbox"/>	<input type="checkbox"/>
Information consultancy	<input type="checkbox"/>	<input type="checkbox"/>
Power and politics	<input type="checkbox"/>	<input type="checkbox"/>
IT skills	<input type="checkbox"/>	<input type="checkbox"/>