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# **Pursuing Efficient Human Resources Management using Computerized Systems**

**Case Study:** Temmy Global Services Nigeria

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## **Thesis abstract**

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The thesis was set out to examine the computerized systems in an enterprise and to assess the extent to which efficiency in the management of human resources can be pursued using these systems. The aim of the thesis therefore was to determine the extent to which the efficiency in the management of human resources can be pursued using computerised systems in an enterprise in Nigeria.

The research for this thesis was carried out by the help of books, journals, e-books, websites and online material. The report has strictly been written using secondary sources of data. In using secondary data sources, information gotten for the thesis was developed through qualitative research. The research design was done using the case study model. Temmy Global Services, a Web Design company, in Nigeria is highlighted as the main case study. In this vein, a SWOT analysis was done for the case organization before and after computerization of its management system and the research findings, conclusion and recommendations made about possibilities of enhancing the efficiency of management of human resources using computerized management systems.

From this research, it was found that that efficient management of human resources improved with the use of computerised management systems in Temmy Global Services in Nigeria. The study recommended that enterprises should consider implementing computerised systems of management in order to ensure efficient management of their human resources.

Keywords: Human resources, management, computerized systems, efficiency, Information Systems, business

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## **Terms and Abbreviations**

**Computerized Systems.**

**Efficient Management .**

**Human Resources Management**

**HRIS**                      Human Resource Information System.

**HRM**                      Human Resource Management.

**SWOT**                      Strengths Weaknesses Opportunities Threats.

**ICT**                      Information and Communications Technology

**IT**                      Information Technology

**LMS**                      Learning management system

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## Special Symbols

% Percentage

“ Quotation marks or inverted

## 1 INTRODUCTION

It is a generally accepted view in the business community that there is a close relationship between profitability, customer service and effectively managed human resources; therefore, tapping into this resource provides the company with a wealth of talent, commonly known as 'people power'. In this vein, one of the greatest challenges for managers including human resources managers in enterprises all over the world is about how to take full advantage of the opportunities presented by the advent of computers and its associated computerised processes and technologies to raise the productivity of organisations. These digital aspects of computing can be said to have greatly transformed the management of especially human resources in an enterprise. Several action plans have been developed and implemented by a lot of firms to speedily and automatically gather, store, process and/or output information. Investing in better computerized systems of management in an enterprise with the aim of bridging the digital divide and contributing to the construction and strengthening of the information society in all aspects of business management across the world, is the main concern of leading world economies. Among these initiatives is the subsidization of imports of computer systems and related apparels. These attempts to directly computerize business management processes notwithstanding, the question as to whether computerized systems have been impacting positively on the management of human resources in an enterprise remains a cause for concern. In other words, there seem to be evidence that computerised systems especially human resource management information systems in an enterprise, can usher in the efficient management of human resources in the enterprise.

Presumably, costs can be lowered by using computerised systems. However, in some countries, serious limitations exist on the availability and quality of inputs and on the range of practical and affordable technologies. In its simplest terms, efficiency in human resources management (HRM) means achieving the desired goals of HRM at lower costs or achieving more of those goals without increasing costs. But it is not that simple. Indeed, since the introduction of computerized systems in most enterprises, it is believed that their use can lead to a more efficient management of resources including greater efficiency in HRM.

The aim of this thesis therefore is to:

- study the possible impact of the introduction and use of computerized systems in an enterprise.
- account for the possible variance in the level of efficiency of the management of its human resources.

This thesis shall therefore investigate and describe the extent to which the case organisation pursues efficiency in HRM using computerised systems. To better understand the problem(s), it would be necessary to ask the following questions:

- What is the level of efficiency of HRM in the case organisation?
- Is there a relationship in the level of efficiency of HRM and the use of computerised systems in the case organisation?

Given that the thesis requires an investigation of the extent to which computerised systems can be used to pursue efficiency in HRM, it is logical to consider a case organisation that makes use of latest computerised systems in its management processes and practices. This thesis shall therefore examine the extent to which computerised systems can be used to pursue efficiency in HRM in a Web Design enterprise with headquarters in Lagos, Nigeria. This thesis is therefore highly justifiable, and it is hoped that through case study methodology, more light would be shed on the problems. This in turn may be a source of motivation to many other researchers whose aim it is to seek solutions to similar problems.

In my opinion, the management of human resources in enterprises with computerized systems have surely experienced a reduction in its overall cost structure and or a reduction in the idleness of its human resources. In effect, computerised systems are very indispensable tools for every enterprise, especially for global enterprises. Therefore, all efforts should be put in place by such firms to know the extent to which efficiency in its HRM can be enhanced using its computerised systems of management, say.

In this vein, it should be a growing concern of different enterprises including global enterprises in Nigeria and in the world at large not to only seek funding and invest

in computerised systems but to justify the need for such investments by clearly describing and showcasing the extent to which efficiency of its human resources management can be enhanced using these systems. More so, the momentum for HRM personnel to have appropriate training towards maximizing their use of latest computerised systems of executing that work tasks would also become a reality. Besides, human resource managers elsewhere may now easily seek to implement relevant strategies that can lead to the optimal use of computerised systems. The owners, directors, workers and customers of businesses using such systems would also benefit a lot in the form of improved productivity, reduced rates of labour turnover and rates of absenteeism, improved levels of employee health and safety and above reduced wastes of human resources.

It is worth also mentioning that by engaging in this study, the efficient management opportunities created as a result of the optimal use of computerised systems would also be exposed. Besides, the studies can also give a clue about the possible reason for the success of highly computerized enterprises in minimising wastes of its human resources. Finally, it is hoped that what is learned from this study will inform more comprehensive studies later.

To achieve its objectives, the research shall proceed as follows. Relevant data and information shall be obtained through an interview with the management of Temmy Global Enterprise in Nigeria. An analysis of the data obtained from and about the management of human resources in the organisation under study shall be undertaken with the use of the SWOT Analysis Model. Finally, a report that combines the understanding of relevant theory and findings from the results of research shall be written.

## **2 BACKGROUND**

### **2.1 Pursuing Efficiency of Management with Computerized Systems in Enterprises**

This research seeks to examine the extent to which computerized systems can be used to pursue efficiency in HRM. To appreciate how efficiency in HRM can possibly be enhanced using computerized systems in an enterprise, the meaning of computerized systems, efficient management and of efficient human resource management in an enterprise are first examined in the first subsection. Possibilities of using computerized systems to pursue efficiency of management in an enterprise is then discussed in the second subsection.

#### **2.1.1 Concept Definitions**

**Computerised Systems:** A computerised system refers to a system that includes software, hardware, application software, operating system software, supporting documentation, e.g. automated laboratory systems, control systems, manufacturing, clinical, or compliance monitoring database systems, etc. (www.igi-global.com, 2020)

**Efficient Management:** To fully appreciate the meaning of efficient Management in any organisation, it is imperative to review the meaning of management and its related terms. In the first place, management refers to a social, practical, dynamic and decision-making process that entails: the pursuit of the goals of an organisation through the efficient and effective planning, organising, and controlling of the resources of the business including gaining the commitment of her personnel towards the achievement of organisational objectives as well as the objectives of its personnel and of other stakeholders. Planning entailing a sub-process of making decisions about the ends (objectives) and about the best means (plan) to achieve the ends of a given entity. Organizing referring to the sub-process of making decisions: about what constitutes the entire work load of an entity, about how best to divide work into work parts, how best to allocate resources to each work part and about what effective coordination mechanism to use so as to integrate the various work parts and

resources towards set objectives of the entity. Leading referring a dynamic sub-process of making decisions about how best to influence human resources to out-perform voluntarily. Controlling referring to the sub-process of reviewing organizational objectives and making decisions about the best performance standards and methods for measuring performance of re-sources, how to measure actual performance and how to take corrective action(s). (Kinicki 2016, 3.)

According Cole & Kelly (2011, 13), management can alternatively be considered a series of roles played by every manager in an organisation. Mintzberg worked with a sample of five executive officers and realized that these managers spent more of their time playing the following roles. He classified these roles into three major categories namely: Interpersonal roles, Informational roles and Decisional roles. Interpersonal Roles referring to managerial activities that re-quire the manager to interact with stakeholders in and out of the organization to gain sustainable and mutual beneficial ex-changes with them. These roles include; figurehead, liaison and leader roles. Informational Roles refer-ring to managerial activities in which relevant information is gathered and communicated to appropriate stakeholders. These roles include monitor, disseminator and spokesperson roles. Decisional Roles referring to activities that require managers to make use of relevant information in order to make well in-formed decisions in the face of challenges, conflicts, etc. These roles include disturbance handler, resources allocated, entrepreneur, negotiator roles.

Efficient management (performance efficiency in management) refers to a measure of output relative to input in terms of financial gain (input cost savings; say) or value to the organization or unit being managed. Examples of performance efficiency measures include cost of labour, equipment utilization, facilities maintenance, and returns on capital investment. (Schermerhorn 2011, 11.)

Human Resources Management (HRM), also known as the “the management of people” has been defined variously by different authors. Some argue that HRM entails a set of the activities an organization carries out to use its human resource effectively. These activities include determining the firm's human resource strategy, staffing, performance evaluation, management development, compensation, and la-

bour relations. It is a management process aimed at implementing strategies, policies and programs required to attract, motivate, develop, reward and retain best people to meet organizational goals and objectives. (Mbah-Njong 2018, 200)

Efficient human resources management is now seen as essential if people at work are to be used productively and intelligently by companies. The management of human resources of a business can be qualified as efficient, if it helps the business to increase the productivity, health & safety of its human resources at work and if it also helps to reduce high costs of labour; high labour turnover, high absenteeism rate, high levels of waste of material resources and also helps to reduce the exposure of its personnel to destructive stress and/or conflicts.

### **2.1.2 Possibilities of pursuing Efficiency in Human Resources Management**

With a clear understanding of what management and human resources management is all about, the meaning of efficient human resources management and the possible levels of efficiency in management can then be reviewed. In one of his books titled “Exploring Management”, leading management writer and re-searcher, Professor Schermerhorn gives a definition of the notion of efficient management that is most suitable for this research. To him, efficient management or performance efficiency in management of an organisation refers to a measure of the output relative to input of that organisation in terms of financial gain (input cost savings; say) or in terms economic value to the organization or to the unit being managed. (Schermerhorn 2011, 31.)

To get this definition of efficiency much clearer, other management researchers assert that efficiency should not be confused with lower costs only. To them, it is a mistake to believe that a lower-cost activity is necessarily more efficient. In other words, it is a mistake to believe that just lowering the cost of training improves efficiency without considering the quality of the activity. Sometimes lower cost leads to higher efficiency, but not always. Where there are excessive expenditures and waste, greater efficiency and lower costs can happen at the same time. However, where more costly human resources lead to proportionately greater productivity, efficiency may involve higher costs. The key point is that the efficiency of an activity

can only be determined by considering the quality of the output, not just the cost of the input. (Cole & Kelly 2011, 17.)

Table 1. Levels of Efficiency in Human Resource Management Performance (Human Development Report 2017, 61.)

Level	Key Characteristics	Level of Efficiency in Human Resources Management Performance	Scale (0 %- 100%)
3	Low Wastes of human resources and high-quality outcomes.	High Efficiency	70% - 99%
2	Moderate Wastes of human resources and somewhat high-quality outcomes.	Moderate Efficiency	50% - 69%
1	High Wastes of human resources and moderate quality outcomes.	Insignificant Efficiency	0% - 49%

There can be more than three levels of management efficiency. However, the table (TABLE 1) above describes just three possible alternative levels of efficiency of management performance in an organisation that can result from the use of computerized systems.

Level 1 refers to the lowest level of efficiency in performance of HRM in an organisation. This level is often characterized by high levels or the existence of wastes of human resources of the organisation. On a scale of 100, this level is rated at by between seventy percent and ninety nine percent.

Level 2 refers to the moderate level of efficiency in performance of HRM in an organisation. This level is often characterized by average levels or the existence of normal levels of wastes of human resources of the organisation. On a scale of 100, this level is rated at by between seventy percent and ninety nine percent.

Level 3 refers to the highest level of efficiency in performance of HRM in an organisation. This level is often characterized by:

- low levels or the absence of idle human resources in the organisation.
- automated notifications and alerts to all stakeholders at the successful completion of user-defined conditions and hence HRM can use this feature for delivering reminders, process/policy updates, and other internal communications.
- tracked employee schedules and time-off management thus optimizing attendance and helps in effective workforce management.
- empowered employees by offering them an option to view, edit, and manage their data (personal and work-related).
- restricted visibility of confidential information by ensuring that employee information is available to only relevant stakeholders.

On a scale of 100, this level is rated at by between seventy percent and ninety nine percent.

## **2.2 Computerized Systems and the Management of human resources of an Enterprise**

This research also seeks to ascertain how computerized systems can possibly enhance human resource management in an organization. To appreciate how computerized can possibly be used to enhance efficiency of HRM in an organization, the general benefits computerized systems are is first discussed in the first subsection. Possibilities of using computerized systems to enhance efficiency of HRM are then examined in the second subsection.

### **2.2.1 Benefits of Computerized Systems**

Majority of companies are shifting towards computerized systems nowadays due to its benefits. Essentially, the proliferation of computer and mobile technologies has made it necessary for businesses to go digital. While some companies can convert goods and services into digital form, some are still drowned in the implementation process challenges. Overall, the benefits that come with digital transformation outweigh the challenges. Seven of the benefits of computerized systems are described below.

Computerized systems deliver a better customer experience: Advancement in technology has increased the way companies interact with their customers. As a result, it helps companies to provide better and consistent experience in fulfilling the needs of customers. These days, part of creating satisfactory customer experience is speed. Therefore, a company that embraces the computerized systems stands a chance of engaging and serving its customers quickly. (atbaccounting-training, 2017).

Computerized systems improve the skill set of employees: As companies continue to adopt new technologies, employees will be required to update their skills in order to meet the changing technological environment. In this regard, the knowledge and the skills of the employees will be elevated. With an increased skill set of the company's employees, it creates agility and better communication among all the departments in the company. Moreover, the quality of work is consistently improved. (cleveraccounting, 2018).

Computerized systems encourage a digital culture: Having a computerized business environment increases productivity and it allows employees to easily adapt to any technological changes within the company. A digital culture develops employees' creativities and thereby leads to innovation. In relation to the skill set improvement, a digital environment encourages continuous learning amongst the employees. Additionally, it keeps the employees motivated and agile at all time. (itseducation, 2019).

Computerized systems improve data collection and analysis: Another business benefit of digital transformation is the online data collection. With the available data analytics tools, it becomes easier to monitor, collect and analyse customer data for making informed decisions. Data collection and analysis process has opened new opportunities for digital businesses. Basically, it helps to further enhance business strategies by studying the online habits of consumers. (atbaccountingtraining, 2017).

Computerized systems enable digitalisation of products/services: The advancement in technology, as alluded to earlier, also contribute to the changing behaviour of consumers. Nowadays, customers want to get things done quicker than usual, and they buy from the company that can fulfil speedy processes. Through computerized systems, companies can convert tangible goods into digital goods in order to meet the needs of their customers. (itseducation, 2019).

Computerized systems make the company more profitable: Digital transformation, in many cases, affects other aspects of the business positively. If the process is successfully implemented, the chances of increasing revenue are very high. So, improving customer experiences and engagement leads to customer loyalty. In turn, the customers stick with the company with more deals. Moreover, digital transformation opens the door for new sales channels and markets. (Smallbusiness, 2017)

Computerized systems keep the pace of competition: Being able to compete is what ensures the survivability of a company. With the prevalent world of digitization and continuous transformation of the business environment, competition will continue to grow. So, by transforming the company into a digital business, an organisation is keeping the pace with the competition. And this will have favourable change on everything that revolves around the business. To conclude, the benefits of digital transformation are more than the ones listed above. For some companies, the gains they derive after the implementation supersede what had been anticipated. (cleveraccounting, 2018).

### **2.2.2 Pursuing Efficiency of HRM using Computerized Systems in Enterprise**

Contemporary HRM sees the use of ICT as a catalyst to operational efficiency. This view has been supported by ever increasing investment in developing countries in ICT related management devices (Piabuo, 2017).

The HRM function consists of pursuing existing employee data which traditionally includes personal records, skills, abilities, activities and salary. To reduce the manual workload of these administrative activities, organizations began to electronically automate many of these processes by introducing specialized human resource management systems. HR executives rely on internal or external IT professionals to develop and maintain an integrated Human Resource Information System (HRIS). Human resource management systems facilitated gradually advanced administrative control of such systems. Other human resources functions such as recruitment, hiring, performance appraisals, compensation, benefits administration and training can all be done without paper. Running a business will generate a lot of information, both related to the business and related to the organization's employees. (Singh, 2014)

First, they don't want confidential information about the organization or employees getting into the wrong hands. Additionally, a human resource information software system is a wise choice because it will reduce the amount of paper generated, organize your data, streamline processes, and help your organization's bottom line. The HRIS system is an investment to an organization and is more than just a storage and organizational tool to contain confidential information about an organization's employees. Today computer applications are merely thought as another management, which when used properly, helps an organization to enhance the quality of products and services it offers. (Singh, 2014)

As such there is little or no room for argument on the notion that "people" are one of the key assets determining the success or failure of an organization and hence the importance of knowledge, skills, attitudes and behaviours of these people for the betterment of an organization. "People" are the key assets that can bring growth and development in an organization. Though a company does not have absolute

power over this asset, they can make use of certain tools and techniques to exert some vital influence over the way they perform towards achieving the goal of the organization. "The adoption of information and communication technology (ICT) in delivering Human Resource management functions, due to the digital revolution in the world is such a tool that organizations have employed to manipulate the performance and behaviour of the people on whom they rely onto achieve business success" (Piabuo, 2017).

The following is a set of recommendations based on the results of the study, hoping for the administrations of the organisations concerned to study the development of e-HRM and to benefit from this field in enhancing the orientation towards electronic management. These recommendations are: Providing financial support to IT centres for their importance in the process of change to e-governance; Searching for sources of funding for changing projects to electronic management and put them in the priorities of strategic plans for businesses; Making use of ICT tools in the process of changing to electronic management; Keeping abreast of the rapid changes in the field of electronic management and the tools and means of ICT; Developing computerized management information systems to cover all administrative aspects; Adopting internal electronic correspondence instead of paper, this contributes significantly to reduce administrative financial expenses, and the speed of completion of work; Integrating computerized management information systems, and work to link what is currently fully present as a beginning to a gradual transition to electronic management. (hal, 2017)

Human resource information systems (HRIS) have gradually transformed from the time it was first introduced at General Electric in the 1950s. It has transformed from a basic process of manual information keeping systems into computerized systems, to the HRIS systems that are used today. In the late 1980s, before the "client-server" architecture evolved, every single HR automation process was done on mainframe computers because only it could handle large amounts of data transactions with high speed and accuracy. But this required huge capital investment to purchase or program proprietary software, and were limited to large organisations since, only they were able to afford internal IT capabilities. With the advent of client-server

HRMS even medium sized companies could afford and authorize their HR executives to have ownership of HRIS. Gradually, to reduce the manual workload big organisations began to electronically automate many of these processes by introducing innovative HRIS technology. And there emerged the computerised HRIS for maintaining HR records. So, “Human resource information system (HRIS) is a systematic way of storing data and information for each individual employee for planning, selection, about welfare & safety, termination & promotion” (citeseerx, 2014)

Expressed both locally and internationally through ICTs, people’s sense of self is increasingly generating a shared sense of experience, beyond the confines of geographic space. Through ICTs, we are experiencing increased exposure to external influences which have deep impacts on humans and their performance (Greig, 2002). We can now experience “timeliness in a given task” the capacity to function in real-time across the world without delay and at our convenience, with blurred distinction between physical and digital experiences (Castells, 2000). The Information Age also affects us through its media and images, which alters our lives, communities, nations and states, and have tremendous impacts on our identities and our imagination (Appadurai, 1996). Cultural flows are travelling in all directions, to and from both developed and developing countries. As a result of digital divide, the use and benefits of ICTs are a reality and a strategy that still re-mains out of the reach of many people in the world (Shields, 2003), but we can imagine that few are truly sheltered from the impacts of ICTs. The communications that occur through these channels do spread beyond their initial medium through other means and therefore tend to reach much wider audiences. The contents of online communications have the ability of travelling between the physical and virtual worlds, and back again, both in developed and developing countries (Piabuo, 2017).

In addition, many enterprises are still using traditional methods, and these enterprises can switch to use ICTs only if the benefits derived are higher than the investment and maintenance costs. Human resource processes should be focused on the strategic objectives. These strategies are led to prepare an IT strategic plan that in turn translates into an appropriate human resource strategic plan in the field of IT. Therefore, it remains evident that if technology is to foster the effective management of HRM performance in organizations, it has to be able to support not only

access to documented knowledge but, most importantly, knowledge held by individuals who are the main resources (assets) of the organization. In addition to enhancing the visibility and traceability of such knowledge, technology needs to aim at catalysing collaboration and knowledge transfer among its holders both within and among organizations. It is with this premises that aiding the process of finding “The impact of ICT on the efficiency of HRM in Cameroonian enterprises” is conceived. (Piabuo, 2017)

Although there are different explanations for the absence of a relationship between ICT and efficiency (such as, the difficulty of measuring costs and benefits), we propose that, unless organizations have complementary resources, they will be unable to make the most of ICT. According to the theory of complementarities (Gargallo-Castel and Galve-Górriz 2007) we consider that the benefits will be greater if ICT is used together with the adequate organizational resources and capabilities, specifically workers' qualifications, proactive direction and innovative culture, taking advantage of complementarities. (Piabuo, 2017)

Some authors have also attempted to identify differences on the role of IT between services and process-oriented industries, and significant differences were found (Premkumer 1992). Most of the existing studies were conducted in Western Europe and in the United States, and their result may not be applicable to the other parts of the world due to social and economic differences (Seyal et al., 2000). Comparatively, very little has been researched in this field in the developing countries. These studies have equally verified how ICT affects the performance of HRM, Mohammed (2015) investigated the impact of ICT on HRM practices, this study seeks to contribute to literature by investigating how ICT affects the efficiency of HRM (Ability of HRM to operate faster and at a lower cost). (Piabuo, 2017)

Moreover, in contrast to the extent of interest in these issues in other countries, mainly USA, the organizational changes and labour productivity, impacts of ICT have received little research attention, particularly in Cameroon. As a result of this, the main objective of this paper is to offer empirical evidence about the impact of ICT on the efficiency of Human Resource Management functions in Cameroonian enterprises, measured according to several efficiency measurements and considering the importance of complementary elements. (Piabuo, 2017)

The advantages of having a sophisticated Human Resource Information System (HRIS) are: HRIS is monitored by qualified specialists who are well versed with technology; HR functional and tactical processes can manage compliance with federal and state laws, recruitment and selection process, and produce analyses, data and reports for internal and external use; Ease of use for qualified IT specialists; Accuracy of information; Ability to perform HR audits using any combination of parameters; Employees and managers can locate answers and information quickly without the need to consult an HR representative every time. (citeseerx, 2014)

Efficient and effective management of "human capital" progressed to an increasingly imperative and complex process. Benefits: the use of ICTs makes an office paperless, i.e. because of these systems, there is now no need for notepads, post-notes or any day-planners. In accounting, payroll refers to the amount paid to employees for services they provided during a certain period. Payroll is the sum of all financial records of salaries, wages, bonuses and deductions for an employee. The payroll management module has the basic task of automating the pay process in an organization. The outstanding benefit of Payroll Management System is its easy implementation. The Payroll Management System deals with the financial aspects of employee's salary, allowances, deductions, gross pay, net pay etc. and generation of payslips for a specific period. It has the following benefits that are briefly enlisted below: - Manage Employee Information Efficiently. - Define the emoluments, deductions, leave etc. - Generate Pay-Slips - Generate and Manage the Payroll Processes according to the Salary Structure assigned to the employee. - Generation of reports related to employees and their tasks. - Security Management Benefits administration - Benefits administration involves the creation and management of employee benefits, as well as providing a means for employees to be trained in understanding how the benefits work and what types of standards employees must meet in order to qualify for the benefits. This module helps provide a system for organizations to administer and track employee participation in benefits programs. These typically encompass insurance, compensation, profit sharing and retirement. Training and Development – This module tracks employee profiles and schedules training events. It also manages the identification, responsibilities, authorities, and training and Research Cell. (Singh, 2014)

The system, normally called a "learning management system" (LMS) if a standalone product, allows HR to track education, qualifications and skills of the employees, as well as outlining what training courses, books, CDs, web-based learning or materials are available to develop skills. Recruitment - One way in which human resources has been significantly impacted by technology is in the area of recruiting. Before the Internet, HR recruiters had to rely on print publications, such as newspapers, to post jobs and get views for open positions. Other methods such as networking also were used, but HR recruiters did not have the ability to post a job in one or more locations and have millions of people see it all at once. Technology has made recruiting more efficient and in the hands of the right recruiter, more effective as well. Employee Self-Service module - The employee self-service module allows employees to query HR related data and per-form some HR transactions over the system. Employees may query their attendance record from the system without asking the information from HR personnel. The module also lets supervisors approve over-time requests from their subordinates through the system without overloading the task on HR department. Many organizations have gone beyond the traditional functions and developed human resource management information systems, which support recruitment, selection, hiring, job placement, performance appraisals, employee benefit analysis, health, safety and security, while others integrate an outsourced applicant tracking system that encompasses a subset of the above. (Singh, 2014)

The time and attendance module keep a track record of all the activities related to Human Resources and production of services and/or products. It is an advanced module that provides broad flexibility in data collection methods, labour distribution capabilities and data analysis features. Cost analysis and efficiency metrics are some secondary functions of this component of Human Resource Management Information Systems. Performance Appraisal—This module evaluates and compares the job performance of an employee against the set target or other employees. Some applications of performance appraisal are compensation, performance improvement, promotions, termination, test validation etc. There are several potential benefits of organizational performance management conducting formal performance appraisals (PAs). There has been a consensus in the belief that PAs lead to positive implications of organizations, so this module is also incorporated into the modern HR Management Systems. (Singh, 2014)

A Human Resource Information System is a software package that replaces manual, paper-based methods of inputting, tracking and recording employee information. It is organized mainly for the five main areas of Human Resource Management with employee personal records. It facilitates planning by matching right employee for the right job at the right time and in right place. However, Human Resource Information system can be problematic for small businesses due to lack of adequate resources like funds and technology man to handle complex human resource information system. Because it is one of the most expensive technologies to update the system and can suffer from input malfunctions or lack of applications to support the system. Nowadays, there is an increasing demand for HRIS specialists but due to demand and supply mismatch between the manpower needs it becomes difficult to implement. With excess demand, cost to hire an HRIS specialist may be far above the average salary for a computer technology specialist. Apart from this, HRIS also fulfils regulatory compliance for security and tracking of data for protection of personal data and timely generation of re-ports for submission to government agencies. Thus, computerised HRIS is a strong tool used for management of human resources for all types of organisations. (citeseerx, 2014)

The HR department has numerous benefits of this approach:

- Possession of single database of all employees in the company with all necessary information and opportunities for different reports.
- The ability to update databases in real time, based on all changes, which is of extreme importance to regionally diversified companies.
- Elimination of paper forms that are much slower and with much higher probability of errors.
- Employees in HR department do not have to constantly refer to the instructions on working hours, because the application is configured according to existing guidelines, which have reduced delays and uncertainties.
- Reduction or elimination of unemployment in the system, which results in high reliability of data in the system.
- Increased employee satisfaction in HR department due to ease in execution of tasks.
- The ability to establish full control over internal migration of employees and the management of their talents. (Singh, 2014)

### **2.3 The Use of Human Resource Information System in the HRM Department of an Enterprise**

This research also seeks to ascertain how computerized systems such as the Human Resource Information System (HRIS) can possibly enhance the efficiency of human resource management in an enterprise. The Human Resource Information System (HRIS) is a computerized unit that can systematically process and compile different information for easy access and use by HRM for better decision making. To appreciate how such computerized systems can possibly be used to enhance efficiency of HRM in an organization, the specific benefits of HRIS are discussed in this section.

Generally, HRIS helps in recruitment and selection during the employment process and employee training and development issues within a business. It facilitates performance evaluation of an employee understanding proper training methods, utilizing the knowledge imparted to employees in an accessible manner. An HRIS helps companies organize and manage people-related data including employee demographic information like birth date, gender, contact information, and more; employee job information like manager, department, pay rates, and more; benefits selections and time-off balances and requests. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

In the first place, the HRIS of an enterprise can be used to ease the remote recruitment process. By digitizing the recruitment process, it has been easier than ever for the firm to find qualified employees from across town or even across the globe. This can allow your company to appeal to a wider candidate pool so that you are able to find top talent. Plus, there will never be a reason to settle for a barely qualified candidate. By making hiring needs and company information transparent, employee candidates can easily find out everything they must know to become a part of your company. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

In the second place, the HRIS of an enterprise can also be used to improve collaborative hiring in an enterprise. Hiring employees can be a collaborative effort in an enterprise, but the process can become overwhelming when completed the old-fashioned way. Since HRIS was used for hiring by the firm, it has been much easier for the managers and HR professionals involved in the process to take immediate

action. Candidate applications and profiles can be reviewed, and interview feedback may be added. Then, the candidate can be quickly moved on to the next step in the hiring process. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

Thirdly, the HRIS of an enterprise can also be used to provide insights about performance measures of HRM. Some HRIS recruitment features have made it possible to view analytics, based on different aspects of the recruitment process or different employee qualifications. By reviewing numerical data based upon past hires, present performance, and turnover data, you may gain superior insights into correlations that will allow you to make better hiring decisions. When your company has optimized the use of analytics in recruitment, you may be able to increase retention rates, productivity and overall efficiency. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

In addition, the HRIS of an enterprise can also be used to optimize employee satisfaction. Streamlined HRIS recruiting makes the hiring process more convenient and enjoyable for employee candidates. Employee candidates can also gain greater insight into the company, which allows employees to determine whether they are likely to remain content with a company for the long haul. By allowing employees to witness the inner workings of a company before committing to working there, the odds that the employee will stay longer increase quite a bit. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also be used to simplify internal promotion. Since HRIS became used for recruitment processes, it has broken down walls. The Company has been posting hiring needs so that they are viewable by both current employees and outside candidates. This eliminates the favoring issues that crop up when managers only tell certain employees about an open position. Employees are also able to view and apply for available positions, without the level of competition that often occurred in the past. If you are considering acquiring a HRIS that can help with your recruitment, we can help. Visit our vendor match page to get started. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise at can also be used to ease the recruitment management system and this has greatly enhanced the performance of recruitment process and delivers efficiency to the organization. The key characteristics of the recruitment

management system in an enterprise are as follows: organize the whole recruitment process in a well-defined and manageable manner; the system enhances and facilitates comprehensive, reliable, faster and precise online application management; the system reduces the overall recruitment time cycle, thereby reducing cost for the company; the system consolidates online application, outside recruitment agency process, interview stage, etc.; the system stores all the applicant information within the database as to facilitate faster future requirement processing. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also help HRM to create employee profiles that will allow HRM to see an employee's hourly rate or salary and start date at a glance. Being able to simply view all employees' compensation in one place may help you to spot discrepancies and potential opportunities. Besides, the HRIS of an enterprise can also be used by making use of performance management tools for decision making. HRIS often comes with robust performance management tools that can be used to capture behavioral information and performance data. This information can be attached to the employee files and linked to peer-to-peer reviews and self-assessments. Having all this information in one place can make it much easier to make decisions regarding merit increases and other issues affecting compensation. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

With HRIS, employee Compensation can be adjusted instantly. After you have decided to adjust employee compensation, HRIS can be used to plug that information into many different areas where it may be pertinent. If an employee's role has changed, they may require different permissions and job codes, payroll should be adjusted to reflect salary changes, and benefit offerings may change. HRIS may automatically adjust these or may require just a few clicks to make the necessary changes. The HRIS of an enterprise can also be used to improve pay transparency. Pay transparency is an issue that has come forward in different ways in recent years, with many employers seeing the benefits in sharing pay rather than hiding it. A HRIS can be used to effectively communicate base salary standards and raise opportunities in a way that is fair and open for all employees. By sharing succession planning information and linking it to training and development opportunities, employees can

even see where they are and where they have the potential to go within the company. By allowing employees to see these possibilities and how they link to potential salaries, employees get a true view of their advancement opportunities – which may help them to envision their futures. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also be used by making use of Alerts to Spot Errors and Issues. The HRIS helps to flag potential errors and problems with compensation. If an entering error places an employee at a higher salary than was intended, using alerts, the HRIS has been helping to mitigate the problem before an employee is paid at the erroneous rate or must deal with the disappointment of being returned to the correct rate. Conversely, alerts can save employees from accidentally being paid less. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

Additionally, HRIS can make alerts may be set to make you aware of situations that could be unfair or even discriminatory. Reporting could show that a disproportionate percentage of employees of a certain demographic are over or under a certain rate regardless of seniority. This could allow the enterprise to review the situation in more detail to identify and correct the problem before it becomes a legal issue. By using your HRIS for compensation management, the enterprise can optimize its human capital management using tools that are already at its disposal. In order to optimize employee performance, it's necessary to have systems in place to record specific employee goals and then measure each employee's performance as it pertains to achieving those goals. It's very important for goals to be well defined and effective systems to be established to achieve optimal performance, but once these key pieces are in place, HRIS software can help to make performance tracking and management much simpler. HRIS can also help management produce highly effective performance reviews to further improve performance management. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also be used to alter the view of employee performance from a “snapshot” approach to a “progressive” approach. With employee performance being tracked on paper, it is difficult to see the continuous process of employee development and performance. With employee data being saved and available in one place using HRIS, the journey becomes clearer and it is easier to

spot patterns and see improvements or opportunities. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also be used to obtain faster performance feedback: The data about employee performance that is gathered and tracked using HRIS should not be moving in only one direction. Managers benefit greatly from using HRIS features to give employees feedback on a highly regular basis, whether it's on a day-by-day or goal-by-goal basis. By showing employees exactly what was done right and what could be improved as projects are completed, managers can dramatically improve productivity and the quality of work. The HRIS of an enterprise can also be used to tie employee actions to consequences: If employee performance management is disorganized or untimely, employee actions may not be tied directly to consequences. This is dangerous, as it undermines the effectiveness of incentives and penalties in managing employee performance. The real-time reporting that HRIS allows managers to have access to allows managers to respond to employee performance immediately, rewarding great performance as it occurs and working with employees to improve poor performance before the bottom line is affected. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

The HRIS of an enterprise can also be used to Collect Feedback from Peers: Using HRIS to track numerical results only is a mistake. HRIS open opportunities to include feedback about employees from other employees, managers in other departments, customers, and the employees themselves when tracking performance. Reviewing information from all these sources may give managers a better-rounded view of an employee's performance and allow managers to personalize employee development methods more effectively. HRIS can also make it possible for HRM to do employee performance reviews with ease. When HRIS is used regularly to track employee achievements, training, and errors, generating performance reviews becomes much easier. It is no longer necessary for managers to try to remember events from immediately after the last review or to arbitrarily gauge overall progress. Concrete facts and notes are available in the system, so managers can review the employee's performance and give a review based on the whole picture of the employee's life within the company rather than pieces gleaned from past reviews and impressions. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

HRIS in an enterprise can also use its learning management system is an important tool which increases the effectiveness of training, reducing the cost and time involved in the process. Learning management system systematically presents the training motive and content, create the assignments and evaluate the process. They typically maintain and manage the documents needed in the training procedure. Most learning management systems follow software to upload the documents. In this way it is advantageous to both the trainee as well as the trainers. Nowadays, colleges, schools, universities use learning management systems in online courses. It helps in record-keeping of the employees and handles all aspects of the training process. ([www.managementstudyguide.com](http://www.managementstudyguide.com).)

To conclude, the implementation of HRIS in the area of training and development depend upon a gamut of factors which can be both organizational factors as well as employee-oriented factors. Information is collected and analyzed on various parameters like employee personal information, pay scale, absenteeism rates, benefit analysis, etc., from the HRIS database. Apart from this, various other factors like employee development needs, organizational culture, openness to feedback and change, cost or overall return on investment are taken into consideration, before implementing a robust HRIS framework in Training and Development.

## **2.4 Problems affecting the Performance of Computerized Systems in an Enterprise**

One of the objectives of this research work was to x-ray possible problems encountered in the use of computerized systems to pursue the efficient management of human resources. These problems would be examined from two perspectives: Problems faced during the acquisition of computerized systems and those encountered during the operation of these systems.

### **2.4.1 Problems encountered in Setting up Computerized Systems**

Under this section, the problems reviewed will be those from the time of acquisition of computerized systems to the time when these ICTs have been put into use. There

are several of these ongoing challenges to setting up of digitalized infrastructure. The most salient of these problems are discussed in the following paragraphs.

Insufficient funding, whereby obtaining enough finance for investing in computerized systems remains a challenge for every community. Most often the cost of the initial investment outlay is borne by the school community especially the students or their parents. Besides, donors from either national or international spheres are rare. Inadequate machine and material inputs is another setback, owing to the lack of enough financial resources and/or use of specialized consultants in IT, which is not inexpensive too, most of the machine and material inputs are mostly below the expected specifications worthy of producing high performance results. ([www.manage-mentevents.com](http://www.manage-mentevents.com).)

Furthermore, personnel who double as professional experts and IT managers are charged with the management of information. These personnel must engage in planning and implementation of the computerized systems. This often puts a lot of pressure on them, which can subtract from their traditional workloads and leave inadequate time for the effective management of digitalization in the after-school hours. Further reducing workloads and/or underwriting full-time managing staff to alternate between day and after-school use are possible solutions being explored to this problem. Identifying community needs wherein, an early challenge has been that of fitting relevant services for the business community within the context of the digitalisation. ([www.documentmedia.com](http://www.documentmedia.com).)

There is a difficulty of setting up a flexible and adaptable computerized information systems. Enterprises must flexibly and continuously react to (imminent) changes in markets and trading partners. Such changes in the inter- and intra-organizational environment will persist and may even occur at higher frequencies in the future. In addition, enterprises may want to be very dynamic and opportunistic in setting up collaborations with partners, pursuing specific business goals with temporary partnerships. This requires great flexibility, with proper technology support. The technology level itself is also subject to constant change. Many recent advances in IT technologies, such as wireless communication, mobile computing and context-awareness, have opened possibilities for business innovation and new patterns of

use. Enterprises should be able to flexibly and timely adapt to and exploit technological changes without the need for substantial redesign and re-engineering. ([www.documentmedia.com](http://www.documentmedia.com).)

There is a difficulty of setting up a computerized information system that is acceptable by its users. User acceptance seems to reflect whether a system adequately fits the characteristics of the users (e.g. computer knowledge) and the characteristics of the task (e.g. report writing) which is to be performed. Thus, user acceptance can be seen as an adequate indicator whether an information system really supports users in their clinical working processes. When this support is the aim of an information system, then user acceptance can even be an adequate indicator for the overall system's success. The evaluation of user acceptance is mostly conducted using standardized psychometric questionnaires in order to quantitatively measure the construct "user acceptance". Psychometric analyses which deals with the measurement of human characteristics. ([www.documentmedia.com](http://www.documentmedia.com).)

#### **2.4.2 Problems encountered when running Computerized Systems**

Under this section, the problems reviewed will be those from the time of installation of the digitalized infrastructure. The journey towards digitalization will require the organisation to overcome several hurdles. There are several of these ongoing challenges to running of digitalized infrastructure and eventually benefiting from their use. The most common of these problems are discussed below.

Users of computerized information systems assume falsely that more Information is always better: Most managers receive much more data than they can possibly absorb even if they spend all their time trying to do so. Its users assume falsely that they need all information they want: In practice, not all managers do know what information they really need and so to play safe, when system designers ask them the kind of information they need, they would say they want "everything." This often results in an overload of irrelevant information. (Mbah-Njong 2018, 413.)

Computerized information systems are a threat of unemployment: The greater efficiency made possible by computer use has and can result in obsolescence of some jobs and the displacement of some workers. More so, computerized information

systems can lead to the existence of cybercrimes. Since these are often linked to the internet, internet crimes abound. With the almost difficult to regulate nature of the internet (the worldwide network of computer systems); internet crimes such as “Scamming,” “Hacking” and even “Piracy” is a threat to e-businesses. (Mbah-Njong 2018, 426.)

Computerized information systems attract high Costs of running and maintenance of the Computer system: The running and maintenance costs of computer systems can greatly disrupt the smooth usage of computers in businesses due to these additional operating costs incurred. In addition, computerized information systems can have system security Issues. Failure to secure the information systems being used can threaten the wellbeing of the business making use of these systems, e.g. theft of items through system manipulation, copying and sale of secrets to competitors, etc. (Mbah-Njong 2018, 426.)

Computerized information systems may also pose a challenge to the prevalent organizational structure. Work groups in an organization may be created, disbanded, or realigned due to the introduction of a new computer system in an organization. Computerized information systems may also pose a problem in information Design. In some cases, in the past poorly designed computer-based information systems can produce disappointing internal results and a bad public image for the sponsoring organization. (Mbah-Njong 2018, 426.)

Computerized information systems may also suffer from electrical power failure. That the computer depends almost solely on electrical energy to function, constant power failure for business related computer systems can be a source of disrupted business transactions – thus leading to possible losses and even business failure or wind-up. (Mbah-Njong 2018, 426.)

Computerized information systems are also prone to threats of viruses. Viruses especially malignant viruses can completely disrupt and bring to a standstill business operation reliant on such attacked computer system. This can lead to a possible downturn in business operations. (Mbah-Njong 2018, 426.)

### **3 CONDUCTING THE RESEARCH**

The approach adopted for researching this thesis is the qualitative research using case study methodology. The SWOT Analysis case study is used for this thesis. In this chapter, the approach of conducting this research is discussed in its first section. In the second section, case study methodology is presented as suitable for this research. The chapter ends with a presentation of the case organizations in section three.

#### **3.1 Research Methodology**

The field of computing being a relatively new yet very dynamic field suffers from the problems of appropriate analytical models for use in research studies. Moreover, many experts argue that though there seems to be a blind acceptance that investments in computerized systems in general are different from other investments in organizational life, there is no evidence that this is a tested hypothesis. The argument therefore is clear: the problems of investments in computerized systems are the same as for normal investments and therefore, their solutions may also be the same. However, he suggests that new methodology be developed to handle IT related research. For this research, a qualitative research approach in the form of a case study is chosen to create a deeper understanding on how computerized systems can possibly enhance the efficiency of management of human resources. (Yan 2017, 30.)

#### **3.2 Data Gathering Method**

According to Yan (2017, 31-35), case study is one of the most common methods used in qualitative research and it helps researchers to explore the holistic perspective of a real-world event. By making a detailed study of the case organization. In addition, only secondary sources of data have been used as the main source of material for this report. Publications and research work on the use of computerized systems to pursue management efficiency were reviewed as well as concepts on

management performance measures especially related with the management of human resources were also reviewed on the Internet and elsewhere to obtain information. Online sources as well as other electronic sources were mostly consulted, and substantial information was gotten from these e-sources. A list of textbooks was read for this research. The internet and friends were also useful secondary sources of data.

### **3.3 Data Analysis Method**

The SWOT analysis case study model is the methodology used to analyse the data collected for this research. SWOT is a strategic analytical tool for assessing strengths and weaknesses of a business, analysing opportunities available to the business, as well as threats faced by the business. SWOT analysis can be used at organizational and personal levels ([www.smartsheet.com](http://www.smartsheet.com)). In matrix form, SWOT Analysis can be summarized using a SWOT matrix template in Microsoft Excel. This SWOT matrix template provides the basic 2x2 layout for an easy-to-read view of the analysis. It also includes a column for measuring the significance of each item in the SWOT categories. This is important for understanding how the different elements in the analysis measure up to each other and which areas require the most attention. Since it is an Excel template, additional worksheets for supporting data or other analyses can be used. The functionality of Excel makes a SWOT matrix a lot simpler to use as summarized in the illustrative table 2 below.

In the basic 2x2 layout matrix form, SWOT Analysis can be summarized thus:

Table 2. SWOT or TOWS Matrix

EXTERNAL APPRAISALS	
 (Threats are transformed into opportunities)	
<u>Opportunities</u> <ul style="list-style-type: none"> <li>• Possible new markets?</li> <li>• Strong Economy?</li> <li>• Weak market rivals?</li> <li>• Emerging technologies?</li> <li>• Growth of existing markets?</li> </ul>	<u>Threats</u> <ul style="list-style-type: none"> <li>• New competitors?</li> <li>• Shortage of resources?</li> <li>• Changing market tastes?</li> <li>• New regulations?</li> <li>• Substitute products?</li> </ul>
<u>Strengths</u> <ul style="list-style-type: none"> <li>• Strong Financing?</li> <li>• Skilled Workforce?</li> <li>• Manufacturing Efficiency?</li> <li>• Superior reputation?</li> <li>• Good market share?</li> </ul>	<u>Weaknesses</u> <ul style="list-style-type: none"> <li>• Weak Management?</li> <li>• Outdated facilities?</li> <li>• Obsolete technologies?</li> <li>• Inadequate R &amp; D?</li> <li>• Past planning failures?</li> </ul>
INTERNAL APPRAISALS  (Weaknesses are transformed into strengths)	

In order to formulate strategies that would take maximum advantage of strengths and opportunities while minimising weaknesses and threats, an environmental analysis known as SWOT analysis or corporate appraisals is necessary to make a relevant strategic choice among the alternative strategies. The three-step process of SWOT Analysis is discussed in the following paragraphs.

The first step is external appraisals. External appraisals are external environmental appraisals for opportunities and threats to convert the threats into opportunities and take advantage of the opportunities. Opportunities are favorable situations and factors that can strengthen competitive advantage of the business or provide the business with new sources of competitive advantage. The list of major opportunities for a business may include new product development, finding new customer segments for existing products, opportunities for further cost reductions thanks to creativity

and technological innovations and others. Threats are unfavorable situations and factors that could create problems for the business compromising its competitive advantage to a certain extent. The most noteworthy threats faced by businesses include, but not limited to the loss of key members of workforce, increase in the prices of raw resources, patent infringement and other lawsuits against the company and others.

The second step is internal appraisals. Internal appraisals are internal environmental appraisals for strengths and weaknesses to convert the weaknesses into strengths and thus build the strategy based on the strengths. The strengths of the firm identified in step II are then matched to attractive opportunities identified in step I above. Strengths refer to attributes, characteristics and factors that give competitive advantage to the business. For example, considerable brand value of the business, cash reserves, first mover advantage and exclusive access to unique resources are major strengths that contribute to competitive advantage of the business. Weaknesses refer to attributes, characteristics and factors that weaken competitiveness of the business in the marketplace. A history of defective products, presence of huge debts and high employee turnover are examples for major weaknesses that a company may have. The three-step process of SWOT Analysis is discussed in the following paragraphs.

The last step consists of matching Strengths to opportunities. Strengths of the firm are then matched to attractive opportunities in its environment. This can be done by formulating and implementing a suitable strategy for the firm.

### **3.4 Temmy Global Services, Nigeria**

Temmy Global Services is a web design and digital marketing company with headquarters in Lagos, Nigeria. Vivian Temmy is the CEO of Temmy Global Services at Jetamera Global services Nigeria Limited. The name Temmy was derived from its founder and CEO. The structure of Temmy Global Services consists of a short chain of command. At the helm of the company is its CEO, in the person of Vivian Temmy. She has an administrative assistant. Directly answerable to the CEO are the administrative manager; the human resource manager; the financial manager; staff and

communications manager, customer service manager, international affairs manager, information services manager and security manager. Directly answerable to the human resource manager is the human resources management information system officer. This structure depicts a decentralized system of management. In other words, decisions for each of the management activities are jointly made by top management and the subordinate staff of the institution. (www.tgtech.com.ng, 2019.)

### **3.4.1 The Use of HRIS in Temmy Global Services, Nigeria**

There are many uses of HRIS in Temmy Global Services. HRIS is helping in recruitment and selection during the employment process, and in the employee compensation and training and development processes within a business. HRIS is helping in Temmy Global Services to organize and manage their people-related data including employee demographic information like birth date, gender, contact information, and more; employee job information like manager, department, pay rates, and more; benefits selections and time-off balances and requests. All these uses of HRIS at Temmy Global Services are discussed in the following paragraphs.

Firstly, HRIS helps to ease remote recruiting at Temmy Global Services. By digitizing the recruitment process, it has been easier than ever for the firm to find qualified employees from across town or even across the globe. This can allow the company to appeal to a wider candidate pool so that you are able to find top talent. Plus, there will never be a reason to settle for a barely qualified candidate. By making hiring needs and company information transparent, employee candidates can easily find out everything they must know to become a part of your company. (www.managementstudyguide.com).

Secondly, HRIS helps to improve collaborative hiring at Temmy Global Services. Hiring employees has been a collaborative effort at Temmy, but the process can become overwhelming when completed the old-fashioned way. Since HRIS was being used for hiring by the firm, it has been much easier for the managers and HR professionals involved in the process to take immediate action. Candidate applications and profiles are reviewed, and interview feedback may be added. Then, the candidate can be quickly moved on to the next step in the hiring process. (www.tgtech.com.ng, 2019.)

HRIS Analytics helps to provide useful insights at Temmy Global Services: Some HRIS recruitment features have made it possible to view analytics, based on different aspects of the recruitment process or different employee qualifications. By reviewing numerical data based upon past hires, present performance, and turnover data, the enterprise may gain superior insights into correlations that will allow the enterprise to make better hiring decisions. ([www.tgtech.com.ng](http://www.tgtech.com.ng), 2019.)

HRIS also helps to optimize employee satisfaction at Temmy Global Services: Streamlined HRIS recruiting makes the hiring process more convenient and enjoyable for employee candidates. Job candidates can also gain greater insight into the company, which allows employees to determine whether they are likely to remain content with a company for the long haul. By allowing employees to witness the inner workings of a company before committing to working there, the odds that the employee will stay longer increase quite a bit.

HRIS also helps to simplify internal promotion at Temmy Global Services: since HRIS became used for recruitment processes, it has broken down walls. The Company has been posting hiring needs so that they are viewable by both current employees and outside candidates. This eliminates the favoring issues that crop up when managers only tell certain employees about an open position. Employees are also able to view and apply for available positions, without the level of competition that often occurred in the past. If you are considering acquiring a HRIS that can help with your recruitment, we can help. Visit our vendor match page to get started. ([www.tgtech.com.ng](http://www.tgtech.com.ng), 2019.)

HRIS at Temmy Global Services also makes use of the recruitment management system and which has greatly enhanced the performance of recruitment process and delivers efficiency to the organization. The key characteristics of the recruitment management system at Temmy are as follows: organize the whole recruitment process in a well-defined and manageable manner; the system enhances and facilitates comprehensive, reliable, faster and precise online application management; the system reduces the overall recruitment time cycle, thereby reducing cost for the company; the system consolidates online application, outside recruitment agency process, interview stage, etc. the system stores all the applicant information within

the database as to facilitate faster future requirement processing. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services also allow HRM to create employee profiles that will allow HRM to see an employee's hourly rate or salary and start date at a glance. Being able to simply view all employees' compensation in one place may help you to spot discrepancies and potential opportunities. HRIS at Temmy Global Services also makes use of performance management tools for decision making. HRIS often come with robust performance management tools that can be used to capture behavioral information and performance data. This information can be attached to the employee files and linked to peer-to-peer reviews and self-assessments. Having all this information in one place can make it much easier to make decisions regarding merit increases and other issues affecting compensation. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services has helped improve pay transparency. Pay transparency is an issue that has come forward in different ways in recent years, with many employers seeing the benefits in sharing pay rather than hiding it. By allowing employees to see these possibilities and how they link to potential salaries, employees get a true view of their advancement opportunities – which may help them to envision their futures. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services also makes use of alerts to spot errors and issues. The HRIS helps to flag potential errors and problems with compensation in the enterprise. By using the HRIS for compensation management, the enterprise can optimize its human capital management using tools that are already at its disposal. HRIS at Temmy Global Services has also helped to alter the view of employee performance from a “snapshot” approach to a “progressive” approach. With employee performance being tracked on paper, it is difficult to see the continuous process of employee development and performance. With employee data being saved and available in one place using HRIS, the journey becomes clearer and it is easier to spot patterns and see improvements or opportunities. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services has also made the firm to obtain Faster Performance Feedback: The data about employee performance that is gathered and

tracked using HRIS should not be moving in only one direction. Managers benefit greatly from using HRIS features to give employees feedback on a highly regular basis, whether it's on a day-by-day or goal-by-goal basis. By showing employees exactly what was done right and what could be improved as projects are completed, managers can dramatically improve productivity and the quality of work. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services is also being used to tie actions to consequences. The real-time reporting that HRIS allows managers to have access to allows managers to respond to employee performance immediately, rewarding great performance as it occurs and working with employees to improve poor performance before the bottom line is affected. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services is also being used to collect feedback from peers. Using HRIS to track numerical results only is a mistake. HRIS open opportunities to include feedback about employees from other employees, managers in other departments, customers, and the employees themselves when tracking performance. Reviewing information from all these sources may give managers a better-rounded view of an employee's performance and allow managers to personalize employee development methods more effectively. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services has also made it possible to do Performance Reviews: When HRIS is used regularly to track employee achievements, training, and errors, generating performance reviews becomes much easier. It is no longer necessary for managers to try to remember events from immediately after the last review or to arbitrarily gauge overall progress. Concrete facts and notes are available in the system, so managers can review the employee's performance and give a review based on the whole picture of the employee's life within the company rather than pieces gleaned from past reviews and impressions.

HRIS at Temmy Global Services is using the Learning management system (LMS) as an important tool which increases the effectiveness of training, reducing the cost and time involved in the process. Learning management system systematically presents the training motive and content, create the assignments and evaluate the process. They typically maintain and manage the documents needed in the training

procedure. Most learning management systems follow software to upload the documents. In this way it is advantageous to both the trainee as well as the trainers. Nowadays, colleges, schools, universities use learning management systems in online courses. It helps in record-keeping of the employees and handles all aspects of the training process.

The implementation of HRIS in the area of Training and Development depend upon a gamut of factors which can be both organizational factors as well as employee-oriented factors. Information is collected and analyzed on various parameters like employee personal information, pay scale, absenteeism rates, benefit analysis, etc. from the HRIS database. Apart from this, various other factors like employee development needs, organizational culture, openness to feedback and change, cost or overall return on investment are taken into consideration, before implementing a robust HRIS framework in Training and Development. (www.tgtech.com.ng, 2019.)

HRIS at Temmy Global Services plans to have high-performing development system before investing in it. They should continuously strive to improve developmental systems. They are possibilities that exiting system, session and procedure may become monotonous in long term there by affecting employee motivation. One of biggest employer fear is that post training employees would look for employment change and hence they do not encourage training. Though this concern is valid in some cases, but overall, it has shown that trained employee shows better motivation level and loyalty. (www.tgtech.com.ng, 2019.)

### **3.4.2 A SWOT Analysis for HRM Department of Temmy Global Services**

SWOT Analysis for an organisation can be captured in a three-stage process. As a process, SWOT Analysis for HRM Department of Temmy Global Services to meet up with the objectives of this research consists of the following basic steps. (Cole & Kelly 2011:101.)

External appraisals are first carried out in the external environment of the HRM Department of Temmy Global Services: This involves an assessment of the external environment of the HRM Department, in order to identify opportunities offered by

and threats coming from a computerised management system, so as to convert the threats into opportunities and add to existing opportunities.

Secondly, an internal appraisal of the organisation is done: This involves an assessment of the internal environment of the HRM Department, in order to identify its management strengths and weaknesses with respect to the use of computerised management system, convert the weaknesses into strengths and add to existing strengths;

Finally, strengths of the computerised management system are then matched with its attractive opportunities. The strengths of the computerised management system identified in step II are then used to develop plans that can take advantage of attractive opportunities identified in step I above. Based on the strengths and opportunities that can be exposed from the above SWOT analysis process, the Administration of computerised management system can discover many possibilities of using computerised management system to improving on the efficiency of human resources management in Temmy Global Services. ([www.tgtech.com.ng](http://www.tgtech.com.ng), 2019.)

## 4 DATA ANALYSIS & RESULTS

This chapter examines data collected from secondary sources in chapter 3 and explores the chances of enhancing efficiency of management of human resources. This chapter makes use of SWOT analysis to compare the level of efficiency of management of human resources of Temmy Global Services. The stage by stage process of SWOT Analysis for the case organization in the preceding chapter can be translated into a matrix form containing summary of information about the opportunities and threats; strengths and weaknesses of the period before and after use of HRMIS in the case organization as shown in figure 1 and figure 2 below.

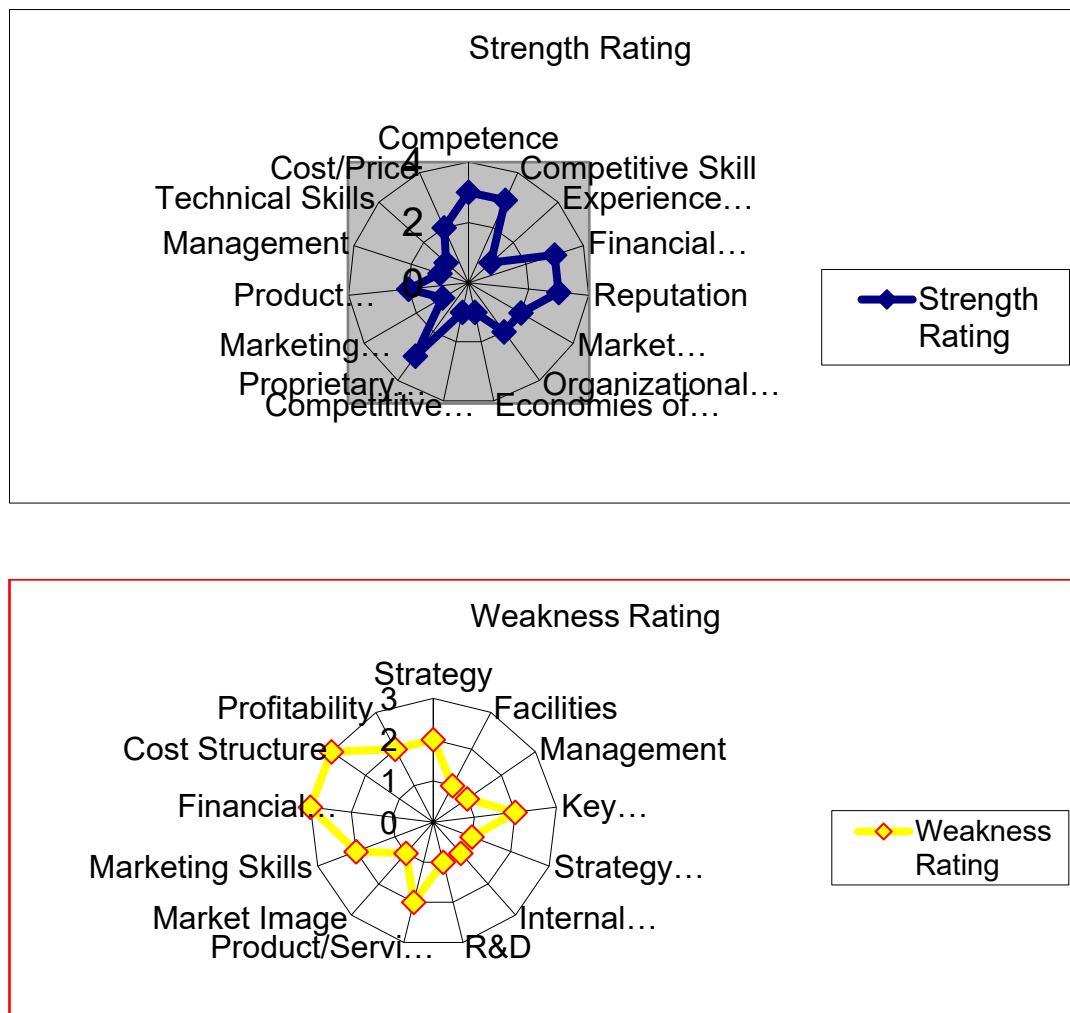


Figure 1. A SWOT Analysis: Ratings of strengths & weaknesses of HRM Department before installation of HRIS (Microsoft Word 2010)

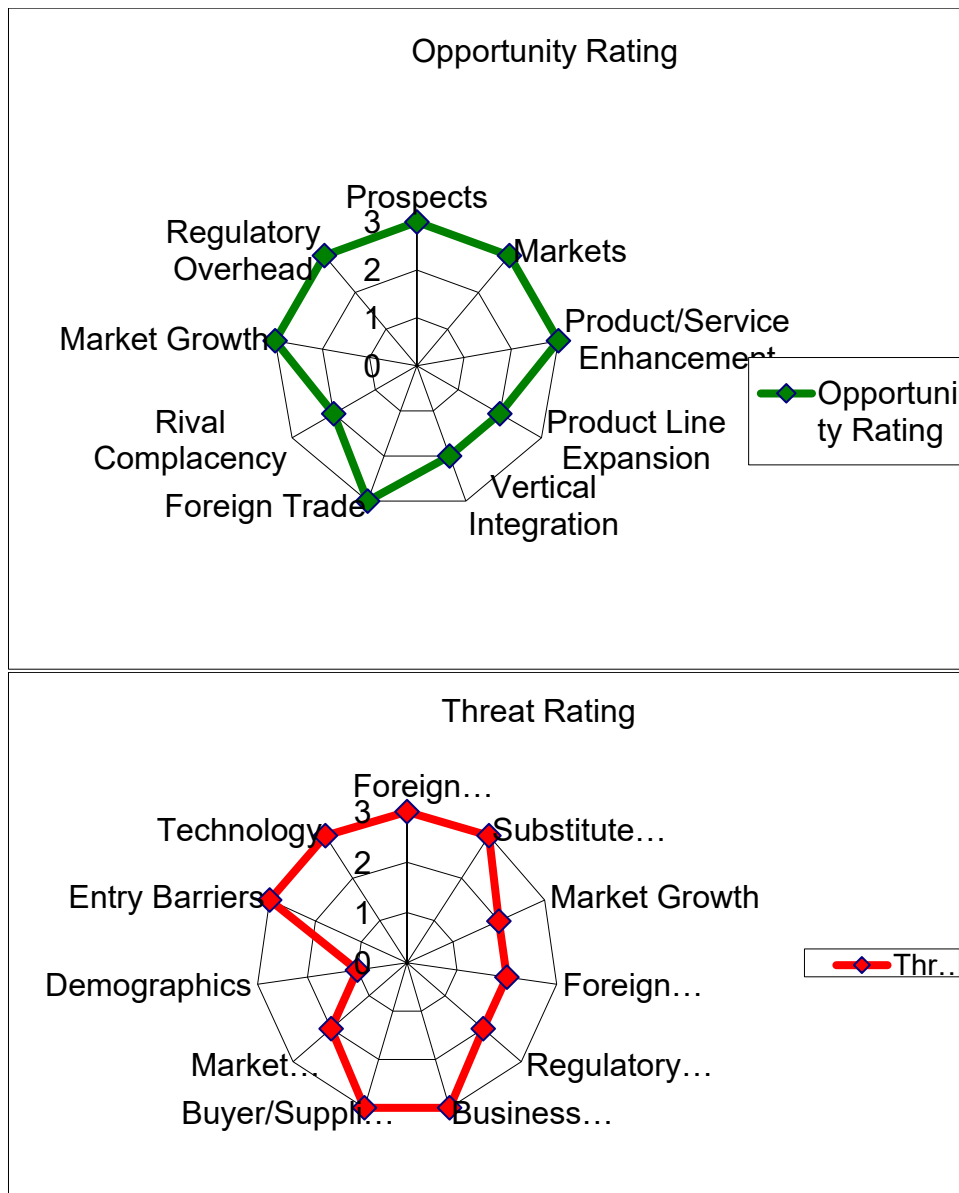


Figure 2. A SWOT Analysis: Ratings of opportunities & threats of HRM Department before installation of HRIS (Microsoft Word 2010)

Based on information in the diagrams (Figure 1 & Figure 2) above, the HRM of Temmy Global Services has greater opportunities with respect to emerging computerized management technologies and lacks relevant strengths to match with these opportunities. Its more centralized hence bureaucratic management style reduces its chances of making full use of computerized management systems that can greatly contribute to enhancing its management efficiency. This is evident by its wastes of human resources which logically signifies the existence of inefficient human resources management in the enterprise as depicted in table 1 of chapter 2 this report.

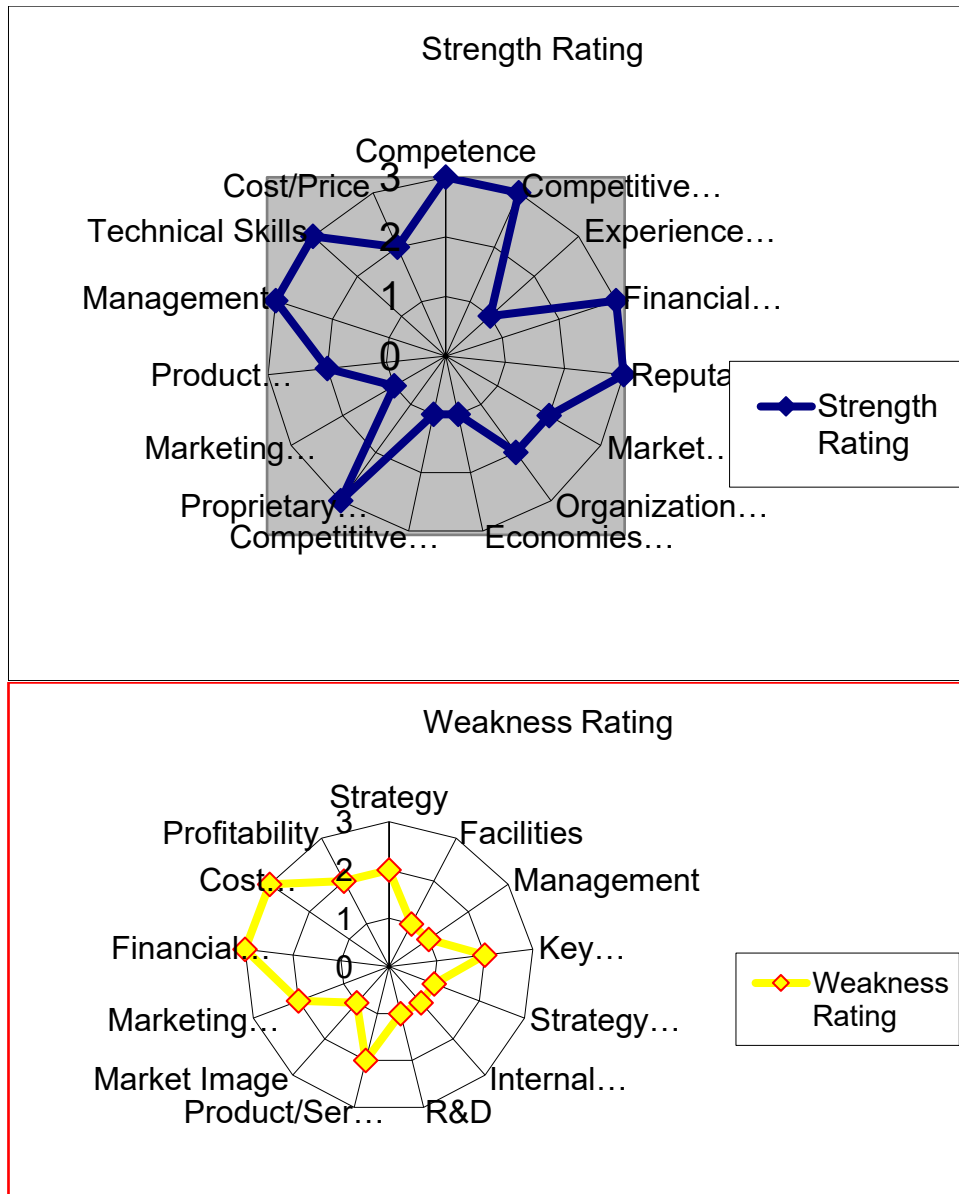


Figure 3. A SWOT Analysis: Ratings of strengths & weaknesses of HRM Department after installation of HRIS (Microsoft Word 2010)

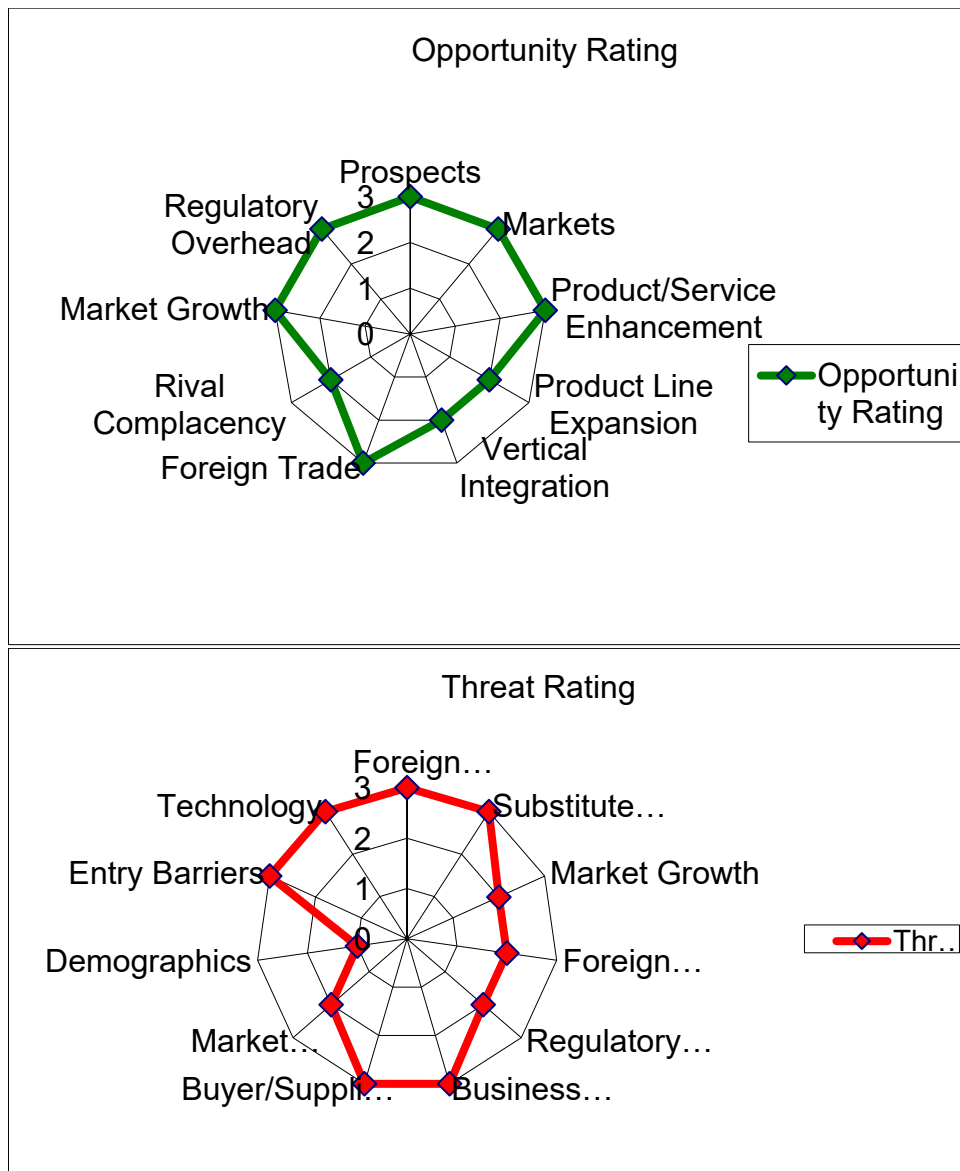


Figure 4. A SWOT Analysis: Ratings of opportunities & threats of HRM Department after installation of HRIS (Microsoft Word 2010)

Based on information in the diagrams (Figure 3 & Figure 4) above, the HRM of Temmy Global Services is matching its strength of a strong participatory management style to take full advantage of the abundance of computing applications in Nigeria and on the Internet. For this main reason, there are higher chances that the use of computerized management technologies can greatly contribute to enhancing the efficiency of management of human resources.

Comparing the levels of efficiency therefore indicate that human resource management is relatively more efficient in Temmy Global Services given that its HRM has more exposure to and makes use emerging computerized management technologies now than before. Based on table 1, the level of efficiency of management of

human resources before the use HRMIS can mostly be qualified as Level 1, referring to the low level of efficiency in management of human resources. This is evidenced by the fact that a SWOT analysis of the HRM of Temmy Global Services as shown in figure 1, indicates when there was no investment in computerized management technologies from Temmy Global Services; there were low levels of wastes of human resources of the enterprise. On a scale of 100, this level is rated at by between zero percent and twenty five percent.

Based on table 1, the level of efficiency of management of human resources can mostly be qualified as Level 3, referring to the high level of efficiency in management of human resources. This is evidenced by the fact that a SWOT analysis of the HRM of Temmy Global Services as shown in figure 2, indicates that the high investment in computerized management technologies from Temmy Global Services management; there are low levels of wastes of human resources of the enterprise. On a scale of 100, this level is rated at by between seventy percent and ninety nine percent.

## 5 CONCLUSION

This report gives information about the possible use of computerized management systems in an enterprise and about the extent to which efficiency in the management of human resources can be pursued using these systems in enterprise. The purpose of this study was to determine the extent to which the efficiency in the management of human resources can be pursued using computerised systems in an enterprise in Nigeria by answering the following research questions: What is the level of efficiency of HRM in the case organisation? And is there a relationship in the level of efficiency of HRM and the use of computerised systems in the case organisation?

In the previous chapter, I analysed data under the basis of the SWOT analysis model. To meet up with this target, my analysis was focused on the possible use of computerised systems especially human resource management information systems in an enterprise to usher in the efficient management of human resources in that enterprise. In Nigeria, the use of computerised management systems has become widespread mostly because of its benefits in this vein. Computerized management systems generally deliver a better customer experience. Computerized systems improve the skill set of employees and encourages a digital culture which can develop creativity of employees and thereby lead to innovation. In relation to the skill set improvement, a computerized or digital environment encourages continuous learning amongst the employees. More so, computerized systems keep the pace of competition by transforming the company into a digital business, organisations are keeping the pace with the competition. However, enterprises in Nigeria, also realize efficient management of their human resources from other techniques not identified in this research.

In this research, I made use of both primary and secondary sources of data. The thesis was therefore done with the help of both primary and secondary sources of data. Obtaining data from primary sources was quite a challenging task given that most institutions are always reluctant to share their data or information on grounds of its confidentiality. There was no major problem with obtaining books and e-books related to possible efficient management of human resources that can be achieved

in an enterprise when a human resource management information system is implemented in an enterprise. However, it was more time consuming to obtain relevant information from these sources that was most suitable for the report.

This study did not identify all the factors that can positively impact on efficient management of human resources in an enterprise. In effect, this thesis falls short of bringing out all aspects human resource management information systems that can possibly be implemented in an enterprise. Besides, there are indeed many other aspects of computerised systems in an enterprise as indicated by the data results of the research in table 4 above. One can therefore argue that the results of this research only represent part of the big picture, given that its scope was also limited to just one enterprise in Nigeria. In other industries and/or in other countries the situation might lead to different results.

To round off, there are many other aspects of computerised systems that can lead to efficient management of human resources which lie beyond the scope of this research. It would also be more rewarding if all efforts can be put in place by similar firms across the world to know the extent to which efficiency in its HRM can be enhanced using a computerised system of management. As the knowledge base grows, researchers would therefore need to pay more attention to evidence that computerised management systems especially human resource management information systems in an enterprise, can usher in the efficient management of its human resources.

## BIBLIOGRAPHY

- Atbaccountingtraining. Benefits of Computerized Accounting Systems. [Ref. 21 February 2020]. Available at: <https://atbaccountingtraining.co.uk/7-benefits-of-computerised-accounting-systems/>
- Bansal, A. 2014. Computerised Human Resource Information System– An Emerging Trend for Managing Human Resources. [Ref. 15 February 2020]. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.683.9857&rep=rep1&type=pdf>
- Cleveraccounting. Advantages Computerized Accounting. [Ref. 20 February 2020]. Available at: <https://www.cleveraccounting.com/9-advantages-computerized-accounting/>
- Cole, G. & Kelly, P. 2011. Management: Theory and Practice. Hampshire: Cengage Learning EMEA.
- Doom, C. 2013. Introduction to Business Information Management. [Ref. 20 May 2020]. Available at: <http://www.nlb.gov.sg/biblio/13735253>.
- Itseducation. Advantages of using Computerised Accounting Software. [Ref. 21 February 2020]. Available at: <https://www.itseducation.asia/article/the-advantages-of-using-computerised-accounting-software>
- Jones, G. R., & George, J. M. (2003). Contemporary Management (3rd ed.). Boston: Mc-Graw Hill Companies.
- Kinicki, W. 2016. Management: A Practical Introduction (8th ed.). New York: McGraw-Hill.
- Kathuria, S. 2014. Role of Computers in Human Resource Management. [Ref. 15 February 2020]. Available at: <http://ijoes.vidyapublications.com/paper/Vol13/05-Vol13.pdf>
- Mazen, M. et al. 2017. The Efficiency of Information Technology and its Role of e-HRM in the Palestinian Universities. [Ref. 15 February 2020]. Available at: <https://hal.archives-ouvertes.fr/hal-01572642/document>
- Management Study Guide. Training and Development and HRIS Applications [Ref. 27 January 2020]. Available at :<https://www.managementstudyguide.com/training-and-development-and-hris-applications.htm>
- Mbah-Njong, A. J. 2018. Business Management Today. Bamenda : Graphics Printers.

- Piabuo, S. M. et al. 2017. The impact of ICT on the efficiency of HRM in Cameroonian enterprises : Case of the Mobile telephone industry. [Ref. 15 February 2020]. Available at: <https://link.springer.com/article/10.1186/s40497-017-0063-5>
- ResearchGate. ICT Application to Human Resource Management. [Ref. 27 January 2020]. Available at: [https://www.researchgate.net/publication/270274215\\_ICT\\_APPLICATION\\_TO\\_HUMAN\\_RESOURCES\\_MANAGEMENT\\_SYSTEM\\_DESIGN](https://www.researchgate.net/publication/270274215_ICT_APPLICATION_TO_HUMAN_RESOURCES_MANAGEMENT_SYSTEM_DESIGN)
- Schermerhorn, J. 2011. Exploring Management. New York: John Wiley & Sons, Incorporated.
- Smallbusiness. Benefits of using Computerized Inventory System. [Ref. 20 February 2020]. Available at: <https://smallbusiness.chron.com/benefits-using-computerized-inventory-system-2044.html>
- Temmy Global Technologies. Services of Temmy Global Technologies. [Ref. 28 May 2020]. Available at: <https://www.tqtech.com.ng>.
- Yan, C. 2017. Cloud Storage Services. [Ref. 20 May 2020]. Available at: <https://www.theseus.fi/bitstream/handle/10024/132555/CLOUD%20STORAGE%20SERVICES.pdf?sequence=1&isAllowed=y>.

## APPENDICES

### APPENDIX 1. Interview Question Guide for SWOT Analysis: Ratings of Strengths of HRM Department (See Figure 1)

Question	Response	Disagree	Neither	Agree	Strength Rating	Category	SCALE
We have a high level of competence	Agree	0	0	1	3	Competence	Disagree
We have competitive skill	Agree	0	0	1	3	Competitive Skill	Neither Agree or Disagree
We are ahead on the experience curve	Disagree	1	0	0	1	Experience Curve	Agree
We have adequate finance resources	Agree	0	0	1	3	Financial Resources	
We have a good reputation with buyers	Agree	0	0	1	3	Reputation	
We are an acknowledged market leader	Neither Agree or Disagree	0	1	0	2	Market Leadership	
We have well-conceived functional areas	Neither Agree or Disagree	0	1	0	2	Organizational Design	
We have access to economies of scale	Disagree	1	0	0	1	Economies of Scale	
We are somewhat insulated from strong competitive pressures	Disagree	1	0	0	1	Competitive Pressure	
We have proprietary technology	Agree	0	0	1	3	Proprietary Technology	
We have better advertising campaigns than the competition	Disagree	1	0	0	1	Marketing Effectiveness	
We are good at creating new products	Neither Agree or Disagree	0	1	0	2	Product Development	
We have strong management	Agree	0	0	1	3	Management	
We have superior /technological/technical skills	Agree	0	0	1	3	Technical Skills	
We have a cost/price advantage	Neither Agree or Disagree	0	1	0	2	Cost/Price	
<b>Total</b>		<b>4</b>	<b>4</b>	<b>7</b>	<b>33</b>		

APPENDIX 2. Interview Question Guide for SWOT Analysis: Ratings of Weaknesses of HRM Department (See Figure 1)

Question	Response	Disagree	Neither	Agree	Weakness Rating	Category	SCALE
We have no clear strategic direction	Neither Agree or Disagree	0	1	0	2	Strategy	Disagree Neither Agree or Disagree
Our facilities are obsolete	Disagree	1	0	0	1	Facilities Management	Disagree
We are lacking managerial depth and talent	Disagree	1	0	0	1		Agree
We are missing key skills or competencies	Neither Agree or Disagree	0	1	0	2	Key Competencies	
We have a poor track record in implementing strategy	Disagree	1	0	0	1	Strategy Implementation	
We are plagued with internal operating problems	Disagree	1	0	0	1	Internal Operations	
We are falling behind on Research & Development	Disagree	1	0	0	1	R&D	
We have a narrow product line	Neither Agree or Disagree	0	1	0	2	Product/Service Line	
We have a weak market image	disagree	1	0	0	1	Market Image	
We have below average marketing skills	Neither Agree or Disagree	0	1	0	2	Marketing Skills	
We are unable to finance needed strategy changes	Agree	0	0	1	3	Financial Resources	
We have higher overall costs relative to our key competitors	Agree	0	0	1	3	Cost Structure	
We have subpar profitability	Neither Agree or Disagree	0	1	0	2	Profitability	
<b>Total</b>		<b>6</b>	<b>5</b>	<b>2</b>	<b>22</b>		

APPENDIX 3. Interview Question Guide for SWOT Analysis: Ratings of Opportunities of HRM Department (See Figure 2)

Question	Response	Opportunity Rating			Category	SCALE
		Disagree	Neither	Agree		
There are additional customer groups that we could serve	Yes	0	0	1	3	Prospects
There are new markets or market segments to enter	Yes	0	0	1	3	Markets
We can expand our products/service line to meet customer needs	Yes	0	0	1	3	Product/Service Enhancement
We can diversify into related products	Maybe	0	1	0	2	Product Line Expansion
We can control sourcing or supply activities (vertical integration)	Maybe	0	1	0	2	Vertical Integration
Falling trade barriers are opening foreign markets to us	Yes	0	0	1	3	Foreign Trade
Our rivals are becoming complacent	Maybe	0	1	0	2	Rival Complacency
The market is growing faster than in the past	Yes	0	0	1	3	Market Growth
Fewer regulatory requirements will make doing business easier for us	Yes	0	0	1	3	Regulatory Overhead
<b>Total</b>		<b>0</b>	<b>3</b>	<b>6</b>	<b>24</b>	

APPENDIX 4. Interview Question Guide for SWOT Analysis: Ratings of Threats of HRM Department (See Figure 2)

Question	Response	Disagree	Neither	Agree	Threat Rating	Category	SCALE
Low-cost foreign competitors are entering the market	Yes	0	0	1	3	Foreign Competition	No
Sales of substitute product/services are rising	Yes	0	0	1	3	Substitute Products	Maybe
The market is growing more slowly than we expected	Maybe	0	1	0	2	Market Growth	Yes
There are adverse shifts in foreign exchange rates and/or trade policies	Maybe	0	1	0	2	Foreign Trade Environment	
Regulatory requirements are becoming onerous	Maybe	0	1	0	2	Regulatory Overhead	
We are vulnerable to changes in the business cycle or to recessions	Yes	0	0	1	3	Business Cycle/Climate	
Our customers and/or suppliers are enjoying growing bargaining power	Yes	0	0	1	3	Buyer/Supplier Power	
Buyer's needs and tastes are changing in directions that point away from our current expertise	Maybe	0	1	0	2	Market Requirements	
Demographic changes are having a negative impact on business	No	1	0	0	1	Demographics	
It's easy to enter this industry (very low barriers to entry)	Yes	0	0	1	3	Entry Barriers	
Technology could change this industry with little or no warning	Yes	0	0	1	3	Technology	
<b>Total</b>		<b>1</b>	<b>4</b>	<b>6</b>	<b>27</b>		



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