

THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ORGANIZATIONAL AND HUMAN CAPACITY DEVELOPMENT: A STUDY OF TERTIARY EDUCATION TRUST FUND

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ABSTRACT

This study discusses the role of Information and Communication of Technology (ICT) in Strategic human resource management in public organization using Tertiary Education Trust Fund (TETFund) as a case study. The study adopted qualitative research. Data was collected through documented evidence from secondary sources such as: textbooks, journals, e-library, newspapers, magazines, official documents dealing with the following: internet access and corporate social responsibility in TETFund management as well as automation of information and communication channels and coordinated development programmes in TETFund management. The empirical findings confirmed that information and communication technology has a positive impact on organization and human capacity enhancement in TETFund. The study found out that: Internet access enhanced corporate social responsibility in TETFund's management. The automation of information and communication channels accounted for coordinated development programmes in TETFund's management.

Keywords: *Information and Communication Technology, Strategic Human Resource Management, TETFUND, Development. Corporate Social Responsibility.*

INTRODUCTION

The human resource management function in organizations has gained increasing strategic emphasis, and the importance of its alignment and business strategies is well-acknowledged. Snell, Stueber, and Lepak (2002:81) observe that "strategic human resource management can meet the challenge of simultaneously becoming more strategic, flexible, cost-efficient, and customer-oriented by leveraging information and communication technology". One of the impacts of information and communication technology is that it enables the creation of an information-based workplace, which leads to what should be a manager's top priority, namely; strategic competence management. Advances in information and communication technology hold the promise of meeting many of the challenges of human resource management, such as attracting, retaining, and motivating employees, meeting the demands for a more strategic human resource function, and managing the human element of technological change in the future. Human resource management could

support the efforts of technological innovation to achieve high performance while such innovation could serve as an approach to enable the human resource function to focus more on value-added activities in order to realize the full potential of technology and organizational strategy. The biggest benefit of using information and communication technology in human resource management to organizations is the freeing of human resource staff from intermediary roles, thus enabling them to concentrate on strategic planning in human resource organization and development. Caudron (2003:79) has also observed that “information and communication technology can automate other routine tasks such as payroll processing, benefits administration, and transactional activities, so that human resource professionals are free to focus on more strategic matters such as boosting productivity”.

However, Modern economic growth and development efforts are interlocked with strategic human capacity building/utilization activities. Despite the abundance of natural resources, our national economy is dominated by labour intensive, low value-adding technologies in a mono-product fuelled economic setting. The twenty first century world is anchored on a highly competitive globalised economy best described as information-rich; knowledge-based; science, technology, and innovation-driven; and predominantly private sector-led. This calls for an integration of science, technology and innovation-driven, value-adding research and development activities into our nation’s development efforts. In some cases, the conducting of fundamental research in areas of comparative national advantage would become necessary.

Information and communication technologies are just as essential for modern society as electricity and water networks. Modern everyday life would be utterly unthinkable without information and communication technologies. ICT is a key technology and an interdisciplinary technology; it helps enterprises to reduce costs, improve processes, boost innovation, and increase productivity. ICT also makes the public sector leaner, faster and more citizen-friendly.

Tertiary Education Trust Fund (TETFund) was established as an intervention agency under the TETFund Act 2011 charged with the responsibility of managing, disbursing and monitoring the education tax to public tertiary institutions in Nigeria. TETFund is a restructured Education Tax Fund (ETF) which was earlier established by Act No 17, 2003. Meanwhile, it is of evidence that the use of information and communication technology accounts for the high performance of the Tertiary Education Trust Fund (TETFund). One of the goals of TETFund is to enhance the potentials of its members through the use of information technology. More so, ICT department of TETFund is to coordinate the activities of the departmental management information system desks for quality assurance, support and empower staff through effective and innovative use of current and future technologies, and training of TETFund staff on ICT with a view to developing their capacities.

Therefore, Information and Communication Technology (ICT) has proved to be a catalyst to fundamental changes in the world's economies and societies by creating more avenues to earn income, allows access to useful information, enhances the world of work and makes the world a global village. The information technology industry spans broadcast, electronics and print media, computers, human resources management, telecommunications and e-commerce activities. David (2006) opined that the recognition of the pivotal role of Information Technology (IT) for development became eminent in Nigeria with the formulation and approval of the National Information Technology (IT) Policy in March, 2001. The formulation of the IT policy was a consultative process that brought together major IT stakeholders such as Computer Association of Nigeria (COAN) now known as Computer society of Nigeria, National Information Technology Professional Associations (NITPA), and Association of Licensed Telecommunication Companies in Nigeria (ALTCON) as well as all Nigerians in the Diaspora. Broderick and Boudreau (2001) assert that IT policy has very clear-cut policy goals on the development of the national information backbone to engender seamless interconnectivity in ICT infrastructure development and human resource management in Nigeria. As a result, the use of information technology in human resource management has grown considerably in recent years. This study therefore, examines the role of ICT in organisational and human resource capacity in public organizations, focusing on TETFund, Abuja.

Technology and human resource management have a broad range of influences upon each other, and human resource professionals should be able to adopt technologies that allow the reengineering of the human resource function, be prepared to support organizational and work-design changes caused by technology, and be able to support a proper managerial climate for innovative and knowledge-based organizations. Akman (2010:243) noted that "the setechnological advances are being driven primarily by strong demands from human resource professionals for enhancement in speed, effectiveness, and cost containment".

Over the years, many authors have written on information and communication technology and strategic human resource management. According to Stone (1995:4) "Human Resource Management has as its central focus, managing people within the employer-employee relationship' and involves marshalling the productive capacity of an organization's members". Furthermore, Wright and Ferris (1996) add that human resource management is concerned with understanding and interpreting the legal framework and context regulating conditions of employment and employment relations. In addition, however, effective Human Resource Management is argued to deliver competitive advantage to firms (Walker, 1992). The ability to achieve this advantage in a rapidly changing and dynamic environment has further extended the

focus of human resource management to include developing organizational capacity to adapt to changing environmental contingencies (Wright and Snell, 1998). In this way, the effective deployment and management of people within organizations is purported to be a powerful tool to respond to complex and turbulent environments and achieve superior organizational outcomes.

More so, Martin et al (2009) opined that the use of ICT can establish more virtual customer relationships within the organization thus enabling it to provide strategic value while Wachira (2010) conclude that human resource management in Africa should be concerned with application of internet and web based systems and increasing mobile technologies to change the nature of interactions among HR staff, line managers and employees.

Meanwhile, none of the authors has sufficiently linked the nexus between internet access and corporate social responsibility and automation of information and communication channels and compliance with the labour and employment laws. It is against this background that this study interrogates the following questions:

How does internet access enhance corporate social responsibility in TETFund

How does ICT enhance human capacity in TETFund?

In what ways do automation of information and communication channels accounts for coordinated development programmes and management in TETFund?

The general objective is to examine the role of information and communication technology in organisational and human capacity development using TETFund as a case study. The specific objectives are to:

1. Determine whether internet access enhance corporate social responsibility in TETFund's management.
2. Find out how ICT enhance human capacity in TETFund
3. Determine how the automation of information and communication channels accounts for

This study adopts ex post facto design. This design explored the cause and effect relationships, where causes already exist and cannot be manipulated. It used what already existed and looks backward to explain why. Causal effect occurs when variation in one phenomenon, an independent variable, leads to or results on average in variation in another phenomenon, the dependent variable.

This study used the qualitative descriptive method of data analysis because it is suitable for analyzing documented and archival materials. Qualitative descriptive analysis essentially has to do with information generated in the research writing. The end in the adoption of this method is founded upon the fact that qualitative research

gathers an in-depth understanding of human behavior, it investigates the why and how actions, inactions, and decision making amongst others affect behavior.

2. FINDINGS AND DISCUSSION

Internet Access and Corporate Social Responsibility

The use of computers and technology today has become fundamental to the operation of organizations and society (Kroecker, 2010; Yonck, 2010). Today, information is carried at phenomenal speeds within and across various communication networks known as information and communication technology networks (ICT). These allow the transfer of massive amounts of information in a matter of seconds, enabling humankind to advance in a multitude of ways. These include the transfer of rapid real-time communication across great distances; enhancing safety through the tracking of air, marine, and ground traffic; enabling rapid calculations and mathematical estimations to be made to enhance predictive capabilities and to advance science; enhancing the usability and manipulative abilities of models to better forecast and envision results in all the sciences; and, enabling and confirming medical diagnosis from considerable distances, among others. The advancements enabled by the transfer of information via computers and technology are readily observed in the ease with which business is conducted across regional and international borders. Corporate social responsibility has been around for a long time in organisations, but is relatively new to electronics. Corporate Social Responsibility has gone mainstream. Today, thousands of people are involved in discussing and drawing up codes of conduct, and monitoring and auditing them. More and more universities and business schools offer courses in business ethics. There is near continuous growth in the number of ethical investment funds, in the number of articles in the press that assess companies' social and environmental performance, and in the number of companies that issue sustainability and corporate responsibility reports.

Recently, ICT permeates many different industries and is responsible for the growth of production and revenue (Basu and Ferald, 2008). With the increasing global penetration of computers and networks enabled by the Internet (Chinn and Fairlie, 2007), there are many studies indicating the adoption of ICT positively impacts concepts such as creation of significant differences in the world, economic productivity, poverty alleviation, and sustainable development. ICT is recognized as a powerful tool due to its ability to integrate all actors into a cohesive amalgam, capable of creating change. However, this section discusses the following: Internet Service Provider and corporate governance in TETFund management, Access to Operating System and Team-Building in TETFund management, and Use of Networking System and High-performance work system in TETFund management.

Internet Service Providers (ISP) and Corporate Governance in TETFund Management

An Internet service provider is an organization that provides services for accessing, using, or participating in the Internet. Internet services typically provided by ISPs include Internet access, Internet transit, domain name registration, web hosting, collocation. Internet access is provided by internet service providers that employ a range of technologies to connect users to their network. Internet Service Providers (ISPs) operate to facilitate communication via the Internet. The Internet is an interconnected global network. The network can carry three types of information: data, video, and voice. To obtain access to the Internet, End Users (i.e., customers) connect to an ISP. Connection is established either through the End User's modem which sends data over the telephone lines of local telephone companies or through a dedicated connection using high speed digital lines between a local area network at the customer's premanagement information systems and the Internet. ISPs connect End Users to Internet Backbone networks. Backbone providers route traffic between different ISPs and interconnect with other Backbone providers. Once connected to the Internet, End Users can send and receive information through these connections. Services provided over the Internet include electronic mail which allows users to send and receive messages using a common addressing system, public domain shareware, news, information, and research material, and engage in electronic commerce.

The Internet is a global network of computers communicating with each other under a common set of computer communication software standards (protocols) known commonly as the Transmanagement information systems Control Protocol/Internet Protocol. The Internet functions as a "packet data" network with a common addressing system. Data is sent over the Internet in discreet packets each of which contains a destination and origination address, its place (first, middle, last) among the total packets sent, and the data itself. The packet finds its way to its destination on the Internet by means of a common addressing system known as domain name service (DNS) and through the use at every address of a device called a Router which has in memory its own address and directions to other addresses. The packets of data upon reaching their addressed destination are then reassembled into a unified whole. Data packets may travel by various routes (not necessarily the same, shortest or most efficient) before reaching their final destinations.

An End User obtains an Internet connection by signing up for service with the ISP. The Service Contract between the End User and the ISP will specify duration of service, type of connection, speed of connection, featured services, and, of course, the fee for the Service package. Most End User service connections are by way of a telephone line and modem on the End User's PC. This type of connection is commonly known as a "dial-up" connection although in business settings there may be an actual hard wire connection between the End User's PC and the ISP. An ISP has certain essential equipment to perform its functions: some form of device to accept

incoming calls from and connect the End User (typically a modem), a server (computer) wherein resides the programs essential to running the ISP, a Router -the device which sends the End User output to the correct computer (address) on the Internet, and finally a Customer Service Unit/Digital Signal Unit (abbreviated CSU/DSU) which is nothing more than a black box device to connect the ISP to other ISPs, through the conventional telephone system.

Philosophically, corporate governance hinges on a clear cut process of directing and controlling the whole essence of companies or business corporations based on the principles of integrity, honesty, transparency and accountability in order to satisfy the interests of all stakeholders. This basic wisdom enhances the widespread and acceptability of the concept in the contemporary time most particularly when the recent widespread corporate scandals and failures which were rooted in dishonest management decisions and outright cover-ups of illicit activities are considered. Corporate governance as a concept is viewed merely as being concerned with the structures within which a corporate entity or enterprise receives its basic orientation and direction (Rwegasira, 2000). One of the most famous definitions of corporation governance was provided by Sir Adrian Cadbury in the report on financial aspect of corporate governance in the United Kingdom in 1992. According to Adrian, Corporate governance is “the system by which companies are directed and controlled”. In its principles of corporate governance (2004), the Organization for Economic Cooperation and Development (OECD) defined corporate governance as a set of relations between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set and the means of attaining those objectives and monitoring performance are determined.

According to Oman (2001), corporate governance is the private and public institution, including laws, regulations and accepted business practices, which in the market economy; govern the relationship between corporate managers and entrepreneurs on one hand, and those who invest resources in corporations on the other. Okehalam and Akinboade (2003), defined corporate governance as the manner in which the power of a corporation is exercised in the stewardship of the corporation’s total portfolio of assets and resources with the objective of maintaining and increasing shareholder value and satisfaction of other stakeholders in the context of its corporate management information systems. Corporate governance implies that companies not only maximize shareholders wealth, but balance the interest of shareholders with those of other stakeholders, employees, customers, suppliers and creditors, so as to achieve long-term sustainable value. From the different perspective of corporate governance given above, we can summarize that the term is concerned with the processes, systems, practices and procedures as well as the formal and informal rules that govern

institutions and the manner in which these rules and regulations are applied and followed.

More so, corporate governance is all about running an organization in a way that guarantees that its owners or stockholders receive a fair return on their investment, while the expectations of other stakeholders are also met (Magdi & Nedareh, 2002). It addresses the need for organizational stewards or managers to act in the best interest of the firm's core stakeholders, particularly, minority shareholders or investors, by ensuring that only actions that facilitate delivery of optimum returns and other favorable outcomes are taken at all times. This is typically facilitated by creating an operating milieu which promotes the observance of codes of conduct that espouse accountability, transparency, fairness, ethical behavior, responsibility and other values designed to act as safeguards against institutional corruption and the management information system management of scarce organizational resources. The policies, rules, processes, practices, programs and institutions used in administering, directing and controlling the operations and affairs of an organization generally constitute the elements and instruments of its corporate governance. Therefore, the elaborateness, clarity, formality and the degree of compliance with these elements and plans reflect the extent to which an organization is likely to experience good corporate governance.

However, from the empirical verifications, we can say that the services of the internet service providers enhance corporate governance in organisations. Nevertheless, the management of TETFund has gained prominence through the use of Information and Communication Technologies in the administration of its projects. Tertiary Education Trust Fund (TETFund) was set up in 1993 to fund Nigeria Infrastructures in Education Sector and to improve the quality of Education in Nigeria. The Education Trust Fund was established by an Act of parliament "Education Tax Fund Act No 7 of 1993". The Act was amended by Act No 40 of 1998. The Tertiary Education Trust Fund (Establishment, etc) Act 2011 therefore repeals the Education Tax Act cap E4 laws of the Federation of Nigeria 2004 and Education Fund Act No 17, 2003. The TETFund is therefore charged with the responsibility of imposing, managing and disbursing the tax to Public Tertiary Institution in Nigeria only. The Act imposed a 2% Education tax on the assessable profit of all registered companies in Nigeria and empowered the Federal Inland Revenue Service FIRS to access and collect the Tax. The Education Trust Fund then, receives the tax from FIRS and disburses to Primary, Secondary, Tertiary and other educational institution across the Federation. The recent amendment therefore changed the Name from Education Trust Fund to Tertiary Education Trust Fund which is for Tertiary Institution only. The Fund monitors the projects executed with the monies allocated to the beneficiary

Access to Operating System and Team Building in TETFund Management

An operating system act as an intermediary between the user of a computer and computer hardware. The purpose of an operating system is to provide an environment in which a user can execute programs in a convenient and efficient manner. An operating system is software that manages the computer hardware. The hardware must provide appropriate mechanisms to ensure the correct operation of the computer system and to prevent user programs from interfering with the proper operation of the system. An Operating system is a program that controls the execution of application programs and acts as an interface between the user of a computer and the computer hardware. Also, an operating system can be seen as one program running at all times on the computer (usually called the kernel), with all else being applications programs. An Operating system is concerned with the allocation of resources and services, such as memory, processors, devices and information. The Operating System correspondingly includes programs to manage these resources, such as a traffic controller, a scheduler, memory management module, and a file system. An operating system provides services to programs and to the users of those programs. It provided by one environment for the execution of programs. The services provided by one operating system is difficult than other operating system. Operating system makes the programming task easier. More so, at the simplest level, an operating system does two things:

1. It manages the hardware and software resources of the system. In a desktop computer, these resources include such things as the processor, memory, disk space and more (On a cell phone, they include the keypad, the screen, the address book, the phone dialer, the battery and the network connection).
2. It provides a stable, consistent way for applications to deal with the hardware without having to know all the details of the hardware.

Overtime, the activities of the internet service providers have relatively encouraged the growth of team building in organisations. Through the use of information and communication technologies, organisations have foster team building, thereby achieving their objectives and goals. In this sense, the management of TETFund has enjoyed growth through the use of information and communication technologies. Most importantly, this growth/development was made possible by the services offered by internet service providers. Therefore, we conclude that there is a great impact of the services of internet service providers on team building in the management of TETFund.

Uses of Computer Networking System and High-Performance Work System in TETFundManagement

A computer network is a group of computer systems and other computing hardware devices that are linked together through communication channels to facilitate communication and resource-sharing among a wide range of users. Networks are commonly categorized based on their characteristics. Information and Communication

Technology (ICT) has also been cited as encompassing potential innovations within and among organizations by enabling the use and sharing of information. The benefits of ICT in organizations include the potential to reshape and reformulate organizations internally, as well as reshape their interactions with other organizations and individuals within the networks in which they lay (Burt and Taylor, 2000). The networks also offer to corporations the opportunity to engage in organizational learning and knowledge management (Castells, 1996; Quinn, 1992) due to the ability to store, retrieve, calculate, and reformulate information (McLoughlin, 1999). ICT networks have been included in numerous corporations and business enterprises including not for profits (Burt and Tayler, 2000), political campaigns among others. The pervasiveness of ICT in business thus makes it an important tool for implementing Corporate Social Responsibility.

Meanwhile, one of the most visible trends in workforce management is the concept of high performance work systems. Nadler (1989) describes them as work systems that maximize the fit between the social (employees and structure) and technology systems. Fit or alignment between employees and technologies is seen as a key factor in the competitive advantage of an organization. The historical roots of the HPWS movement in U.S. industry are described by Cappelli and Neumark (2001). They trace the history of the high performance work practices concept and employer use in the U.S. and identify the success of Japanese imports during the 1970's and 1980's as an important factor. Though authors had alluded to various progressive management practices under the guise of Human Relations of the 1930's-1950's and the Job Enrichment and Redesign research of the 1960's and 1970's, there were few employers who were adopting such practices. Through the success of Japanese manufacturers in consumer electronics and automobiles, U.S. employers were forced to examine the sources of such competitive advantage.

Early claims of superior Japanese work practices which included Quality Circles and Total Quality Management were often times mismanagement information systems as being not relevant for U.S. based manufacturers because of the belief that the success of such practices were dependent on cultural factors present in Japan, but not the U.S. This belief was shattered by the success of the joint venture between Toyota and General Motors in establishing the New United Motor Manufacturing, Inc. (NUMMI). This new company took over the operation of the Fremont, California automobile manufacturing plant of G.M. This plant had had a poor record of productivity, quality, and industrial relations between G.M. management and the local United Autoworkers Union. However, under the NUMMI agreement, Japanese managers would manage the plant and use UAW members as employees once a new, more flexible, collective bargaining agreement was reached. The success of NUMMI has been well documented and appears as a case in the research by Womack, Jones, and Roos (1990)

which was published in a book titled, “The Machine that Changed the World”. The 1990’s saw a rapid increase in the adoption of higher performance work practices as well as research on their effectiveness. In looking at enterprise level data on large for-profit organizations, Lawler, Mohrman, and Benson (2001) found that in 1987, only 28% of firms reported having *any* employees covered by self-managing work teams, while in 1999, 72% of firms reported having at least some employees covered by such teams.

While many managers and scholars alike now believe that high performance work practices raise productivity and profits, some critics question this belief. This is precisely what Freeman and Kleiner (2000) argue after performing a multi-plant survey. What they found instead was that programs such as self-managed work teams, worker-management productivity committees, and employee opinion surveys were only positively related to the higher morale of workers and managers, which the authors were unable to translate into dollar figures.

Helper, Levine and Bendoly’s (2001) survey and field research data suggested that employee involvement practices among blue-collar workers in the auto supply industry tended to raise wages by 3-5%, but not to affect plant survival or employment growth. Similarly, Kling (1995) has argued that benefits of employee involvement, skill training, and other methods are greater when adopted as part of a consistent whole, rather than in isolation. Macduffie (1995) performed an important empirical test of this hypothesis in a survey of 62 auto assembly plants. The author found that flexible production plants with team-based work systems, contingent compensation, extensive training, low inventory and repair buffers consistently outperformed mass production plants. Perhaps the most extensive program along these lines is that of Ichniowski, Shaw, and Prennushi (1997) at the National Bureau of Economic Research. A study of 26 steel mini mills, based on surveys as well as longitudinal data on productivity and production technology found that the adoption of a coherent system of new work practices including work teams, flexible job assignments, employment security, training in multiple jobs, and extensive reliance on incentive pay, produced substantially higher levels of productivity than did more traditional approaches involving narrow job definitions, strict work rules and hourly pay with close supervision.

However, the provision of needed infrastructure for learning at the tertiary level represents one major milestone in the achievement recorded by TETFund. The appointment of the boss of the agency to chair the NEEDS assessment committee visits to universities, no doubt contributed immensely to the resuscitation of dilapidating infrastructures in our higher institutions of learning. Today, TETFund had drawn the attention of government to the yearning needs of our universities, and the global ranking of our universities have as well improved (Rufai, 2012). Introduced by

the TETFund (in 2009) with the support of the government is what is also called “The Special High Impact Project,” where N3 billion is given to a university and N1 billion to polytechnics and colleges of education on the equality of each of the six geopolitical zones to have one university and a polytechnic, or one university and a college of education.

From the empirical investigations and verifications, this study found out that access to internet facilitated social corporate governance in TETFund’s management. The use of ICT in the management of public organizations over the years has helped in the successful management of organizations.

Automation of Communication and Information Channels and Coordinated Development Program

In order to address the research question two and the second specific objective, this sub-section discusses the following: Computerized Information and Communication System and Established Performance Standard in TETFund management, Information Management System and Coordinated Labour in TETFund management, and Use of Communication media and Decision-Support System in TETFund management

Computerized Information and Communication System and Established Performance Standard in TETFund Management

Organizations are today facing a period of rapid computerization of almost all functions. Moreover, the environment of organizations is changing because of the new strategic possibilities of information technology. Computerized information systems are thus affecting organizational structure at multiple levels: they change the internal division of labor and the mechanisms of coordination, and they affect the strategies of the enterprise. Human organizations are natural socio-technical systems, and as such they belong to the most complex in hierarchy of systems. At the heart of this complexity are the nonlinear interactions (feedbacks in auto- and cross-catalytic cycles among organizational subsystems and between the organization and its environment. They amplify the stochastic fluctuations always present within or outside the organization.

Meanwhile, a performance standard is a management-approved expression of the performance thresholds, requirements, or expectations that must be met to be appraised at a particular level of performance. A Fully Successful (or equivalent) standard must be established for each critical element and included in the employee performance plan. If other levels of performance are used by the appraisal program, writing standards for those levels and including them in the performance plan is not required by is encouraged so that employees will know what they have to do to meet

standards higher than fully successful. Information and communication technologies are just as essential for modern society as electricity and water networks.

Modern everyday life would be utterly unthinkable without information and communication technologies. ICT is a key technology and an interdisciplinary technology; it helps enterprises to reduce costs, improve processes, boost innovation, and increase productivity. ICT also makes the public sector leaner, faster and more citizen-friendly. IT has become an indispensable part of contemporary world while human resource management globally has equally being affected in a number of ways through its adoption and application. IT has proved to be a catalyst to fundamental changes in the world's economies and societies by creates more avenues to earn income, allows access to useful information, enhances the world of work and makes the world a global village. The IT industry spans broadcast, electronics and print media, computers, human resources management, telecommunications and e-commerce activities. Information technology has enhanced the ability of human resource managers to produce reliable data via a human resource management system; this in turn allows human resource professionals to make data-driven decisions and to provide other managers with consultancy based upon this data. Finally, with regard to the human resource management role, it is apparent that human resource managers may be able to adopt a more advisory or strategic role due to the increased availability of reliable human resource management data. Many organisations have gone beyond the traditional functions and developed human resource management systems that support recruitment, selection, hiring, job placement, performance appraisals, employee benefit analysis, health, safety and security.

Information Management System and Coordinated Labour in TETFund Management

A management information system is a system or process that provides the information necessary to manage an organization effectively. Management information system and the information it generates are generally considered essential components of prudent and reasonable business decisions. Management information system supplies decision makers with facts; it supports and enhances the overall decision making process. Management information system also enhances job performance throughout an institution. At most senior levels, it provides the data and information to help the board and management make strategic decisions. At other levels, management information system provides the means through which the institution's activities are monitored and information is distributed to management, employees, and customers. Effective management information system should ensure the appropriate presentation formats and time frames required by operations and senior management is met. Management information system can be maintained and developed by either manual or automated systems or a combination of both. It should

always be sufficient to meet an institution's unique business goals and objectives. The effective deliveries of an institution's products and services are supported by the management information system. These systems should be accessible and useable at all appropriate levels of the organization. Management information system is a critical component of the institution's overall risk management strategy. Management information system supports management's ability to perform such reviews. Management information system should be used to recognize, monitor, measure, limit, and manage risks. Frequently, operational processes and feedback devices are intertwined and cannot easily be viewed separately. The most efficient and useable management information system should be both operational and informational.

As such, management can use management information system to measure performance, manage resources, and help an institution comply with regulatory requirements. One example of this would be the managing and reporting of loans to insiders. Management information system can also be used by management to provide feedback on the effectiveness of risk controls. Controls are developed to support the proper management of risk through the institution's policies or practices, operational processes, and the assignment of duties and responsibilities to staff and managers. Technology advances have increased both the availability and volume of information management and the directors have available for both planning and decision making. Correspondingly, technology also increases the potential for inaccurate reporting and flawed decision making. Because data can be extracted from many financial and transaction systems, appropriate control procedures must be set up to ensure that information is correct and relevant. In addition, since management information system often originates from multiple equipment platforms including mainframes, minicomputers, and microcomputers, controls must ensure that systems on smaller computers have processing controls that are as well defined and as effective as those commonly found on the traditionally larger mainframe systems.

A sound system of automated and manual internal controls must exist throughout all information systems processing activities. Information should receive appropriate editing, balancing, and internal control checks. A comprehensive internal and external audit program should be employed to ensure the adequacy of internal controls. Organizations have a coordinating relationship when they modify their activities so that together, they provide better services to their constituents.

By its very nature, management information is designed to meet the unique needs of individual institutions. As a result, management information system requirements will vary depending on the size and complexity of the operations. For example, systems suitable for community sized institutions will not necessarily be adequate for larger institutions. However, basic information needs or requirements are similar in all financial institutions regardless of size. The complexity of the operations and/or

activities, together with institution size, point to the need for management information system of varying degrees of complexity to support the decision-making processes.

Consequently, a good management of information systems leads to good decision-making in business just in the same way poor management leads to poor decision making. It is based on this foundational concept that this paper is going to circumspectly analyze the roles of management systems in decision making. Decisions are based on information available. In relations to this, Jahangir (2005) states that based on the significant role that information plays in choice of decision to be made, organizations must ensure that they have a good management information system. As a fundamental point, a good number of management information system used today can perform multiple tasks all at the same time. This potential to multitask increases efficiency in a company since several business operations can be conducted simultaneously. With special regards to decision making, the capacity to multitask ensures that decisions are made speedily when compared to those systems which can only handle one task at a time. Closely related to the above point, Jahangir (2005) says that some management information system allow multiple users to access the same content all at the same time without any discrepancies. This potentiality boosts accountability from the business operators since multiple people can access a particular content and verify whether they are consistent or whether they are not. As a matter of fact, most organizations tend to suffer due to poor accountability from those charged with the mandate to manage certain details. In contributing to the arguments regarding role of management information system in improving decision making, Rhodes (2010) also adds that management information systems give managers quick access to information. This can include interaction with other decision support systems, information inquiries, cross-referencing of external information and potential data mining techniques. These systems can also compare strategic goals with practical decisions, giving managers a sense of how their decisions fit organizational strategy.

3.2.3 The Use of Communication Media and Decision-Support System (DSS) in TETFund Management

Decision Supports Systems (DSS) are computer-based information systems designed in such a way that help managers to select one of the many alternative solutions to a problem. It is possible to automate some of the decision making processes in a large, computer-based DSS which is sophisticated and analyze huge amount of information fast. It helps corporate to increase market share, reduce costs, increase profitability and enhance quality. The nature of problem itself plays the main role in a process of decision making. A DSS is an interactive computer based information system with an organized collection of models, people, procedures, software, databases, telecommunication, and devices, which helps decision makers to solve unstructured or semi-structured business problems. Also, A Decision Support System (DSS) is an

interactive, flexible, and adaptable computer based information system that utilizes decision rules, models, and model base coupled with a comprehensive database and the decision maker's own insights, leading to specific, implementable decisions in solving problems that would not be amenable to management science models. Thus, a DSS supports complex decision making and increases its effectiveness.

A Decision Support System (DSS) is an interactive computer based system that help decision-makers use data and models to solve structured, unstructured or semi-structured problems (Gore, 1983). Decision support systems can aid human cognitive deficiencies by integrating various sources of information, providing intelligent access to relevant knowledge, and aiding the process of structuring decisions, they can also support choice from among well-defined alternatives (Castro-Schez, Jimens, Moreno, & Rodringues, 2005). Thus, decision support systems will adopt to any changes or demand from the market due to any improvement in the world of technology and the ongoing evolving economy; to respond efficiently and quickly to decision makers and facilitate the decision process, it enhances organization empowerment, either in person or group's ability to make decisions. Decision Support Systems (DSS) are a specific class of computerized information system that supports business and organizational decision-making activities. A properly designed DSS is an interactive software-based system intended to help decision makers compile useful information from raw data, documents, personal knowledge, and business models to identify and solve problems and make decisions (Broun, 2012). It provides information for making semi structured and unstructured decisions by the middle management (Khan and Khan, 2011). It is a decisive system for universities to gain a sustainable competitive advantage by moving beyond customers satisfactions to build positive change in the surrounded environment, practical academic programs, confidence and improving quality of education. More recently, these methods, often enhanced by a variety of techniques originating from information science, cognitive psychology, and artificial intelligence, have been implemented in the form of computer programs, either as stand-alone tools or as integrated computing environments for complex decision making.

In fact, access to communication media enhances decision support system in any organization. The management of TETFund could not be a reality if there is no provision for the use of ICT, which facilitates decision support system. Also, the study found out that the automation of information and communication channels facilitates the institution of coordinated development programmes in the management of TETFund. Therefore, from the empirical analyses and investigations, this study concludes that there is a correlation between the automation of information and communication channels and coordinated development programmes in TETFund's management.

3. RECOMMENDATIONS

Based on the findings, this study recommends as follows:

1. That the management of TETFund should provide avenue for quality internet facilities for more corporate social responsibility. The management should also put more efforts in order to acquire modern technologies for favourable development.
2. TETFund should provide opportunities for ICT training and develop clear policies, guidelines and strategies for better use of ICT equipment.
3. All affected users should be trained properly on any new upcoming software or computer hardware constituting ICT infrastructure. Organisations should use current ICTs technologies as possible in all areas of operations so as to maintain consistency in their modern management practices if quality management has to be maintained.

4. CONCLUSION

Based on the first question, the study found that internet access led to corporate social responsibility in TETFund's management. With the increasing global penetration of computers and networks enabled by the Internet, there are many studies indicating that the adoption of ICT positively impacts concepts such as creation of significant differences in the world, economic productivity, poverty alleviation, and sustainable development.

Based on the second question, the study concludes that the automation of communication and information channels accounted for coordinated development programmes in TETFund's management. Office automation software is designed and produced by examining the models of activities of government and the needs of public sector organizations

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