

HUMAN RESOURCES INFORMATION SYSTEM AND PERSONNEL ADMINISTRATION OF TERTIARY INSTITUTIONS IN NIGERIA.

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ABSTRACT

The study examined human resource information systems and personnel administration of tertiary institutions in Nigeria. The research design for the study was a correlational research design. The population of the study consisted of one hundred and eight (108) administrative heads from thirty-six (36) selected tertiary institution in South-South, Nigeria Mean and standard deviation were used to analyze the research questions; the tests of hypotheses 1 to 9 (bivariate analysis) were done using Spearman Rank Order Correlation, and; the test of hypotheses. The results of the study showed that there is a significant positive relationship between human resource information systems such as HRIS skills and personnel administration of tertiary institutions in Nigeria. The study concluded that the adoption of human resource information systems such as human resource support systems, human resource information system skills, and human resource information system components promotes administrative effectiveness, especially in terms of efficient personnel administration, effective time management, and financial efficiency. Among other things, the study recommended that management of tertiary institutions should make available state-of-the-art Human Resource Information Systems for administrative heads and other administrators to utilize in carrying out their functions effectively.

Keywords: HRIS, Personnel Administration, Efficiency, Effectiveness

INTRODUCTION

Human resource information systems are typically used in schools to give administrators access to all employee data, reports, employee handbooks, performance reviews, payroll management, recruitment, training, and assistance with strategic decision-making. As a learning institution, the school is tasked with carrying out educational policies and achieving educational objectives. Without efficient school management, this cannot be accomplished. Administrative effectiveness is about consistently performing effective tasks and timely achieving predetermined goals. Administrative effectiveness, according to Akomolafe (2012), is the result of administrative acts and efforts that are taken with the objective of achieving predetermined goals. According to Akinola (2013), the success of a school program is measured by how well its predetermined aims or objectives are achieved. The degree of accountability held by school administrators, school performance, improvement, curriculum implementation, effective resource management, monitoring, appropriate task delegation, timely completion of responsibilities, and continuous goal-setting are all ways to gauge administrative success (Akinfolarin, 2017). Staff personnel administration, financial management, student personnel administration, record management, and facility maintenance are some of the administrative areas of higher institutions.

In order to properly manage funds, good school managers, according to Ikediugwu (2016), must handle educational resources such as funds, materials, and equipment such as computers, teaching technology, and internal facilities, wisely and effectively. Okon, et al. (2015) claimed that there is no doubt that tertiary education in Nigeria has grown more complicated over time with concomitant managerial demands being imposed on the information and communication technology (ICT) era. This is due to the different functions of the school administrator. Only through administrative processes that are characterized by the information system in the areas of organized data processing, information storage, and retrieval system, among others, can such management and administrative demands be carried out efficiently.

An structured and efficient method of employee and job-related information collection, processing, storage, and retrieval is what the human resource information system, a tool in the management information system, is supposed to do. It involves using contemporary tools and automated processes to input, process, store, and retrieve organizational data for efficient administration. According to Madiha (2013), information systems are utilized by schools to assist a variety of administrative tasks such personnel and resource allocation, reporting management, and attendance monitoring. Computerized staff administrative management is the part of school administration that this study focuses on.

Employee databases administration refers to a range of administrative services provided by school administrators with the goal of facilitating efficiency in staff concerns. Employee database administration, according to Egeh *et al.* (2016), includes all tasks and services that schools perform for their personnel outside of regular class instruction in order to meet their academic goals. It includes all of the tasks and assistance provided to employees in order to ensure that they have a stimulating work environment (Akpan and Onabe, 2016). Demand for educational services is rising in the school system at all levels. Tertiary school administrators now have to deal with enormous amounts of data that they must quickly process in order to disseminate information to the various stakeholders in higher education, the teaching and learning staff within the academic community, as well as the general public. This is due to the dramatic increase in the number of employees in our schools as well as the variety of job roles they play. HRIS is utilized in educational administration for a variety of tasks, including processing admissions, observing staff attendance at work, calculating staff evaluations, controlling, and integrating staff financial information, among other things.

When Hussein (2008) conducted a case study on "The role of Human Resources Information System in improving Management of Resources in the Public Sector at the President's Office- Public Services Management," it became clear that, despite an appealing establishment level of computerization and Human Resources Information System adoption, the HRIS has not yet been successful in enhancing management of human resources in the public sector. Hanadi (2010) offered the study's findings, which showed that the four Jordanian mobile businesses' (152) respondents' utilization of HRIS in strategic human resources planning. Additionally, strategic human resource planners understood the value of utilizing human resource information systems in their planning. But the researcher has noticed that none of the scholars who have studied this issue have thought about the prospect of easing the administrative tasks of heads of tertiary institutions by utilizing human resource information systems (HRIS). This work is therefore poised to unravel the relationship between human resource information system and the effective administration of tertiary education in South-South, Nigeria.

HRIS (Human Resource Information Systems) Skills

Human Resource Information System Skills were defined by Tapscott (2018) as the mastery of the process of communicating with others at a specific time and location using digital devices including cell phones, tablets, laptops, and other comparable electronic devices. The ability of a citizen, student, teacher, employee, etc. to use information technology (IT) in a particular environment is referred to as having digital communications proficiencies (Rizza, 2014). The literature typically uses terms like digital proficiencies, digital skills, e-proficiencies or e-skills, and twenty-first century skills or proficiencies to define, describe, or explain this capacity to use IT. These names allude to distinct ideas that are not interchangeable. Use of Information Society Technology (IST) for work, play, and communication involves being confident and critical in your use of it. Using digital devices like smartphones, computers, and other comparable electronic devices, human resource information system skills improve the transport of data (a digital bitstream or a digitized analog signal) through a point-to-point or point-to-multipoint communication channel (Bullen et al., 2011).

Human Resource Information System Skill, conceptually, relates to the mastery of the capacity to successfully communicate digitally via electronic media. These skills will enable uniform and efficient communication delivery. Basic ICT abilities, such as the use of computers to access, assess, store, produce, present, and exchange information as well as to communicate and take part in collaborative networks online, serve as the foundation for human resource information system skills (European Parliament and the Council, 2006). The knowledge, skills, attitudes, abilities, strategies, and awareness needed to use ICT and digital media to solve problems, communicate, manage information, collaborate, create, and share knowledge for work, leisure, participation, learning, socializing, empowerment, and consumerism are known as human resource information system skills (Bloom, 2016). Given the abundance of information available online, being able to obtain, pick out, and manage pertinent data/information is regarded as a vital competency. The essential to effective involvement in the information society is digital literacy, or the constructive and critical application of ICT (a stage that leads to human resource information system skill). Literacy, numeracy, and numerous subject-based proficiencies are all accelerated by ICT proficiency. Any user of the internet should be socially adept and familiar with the protocol for texting, email, and chat rooms. A digital divide between those who have access to the internet and those who do not could have major effects on social cohesion by separating the information-rich from the information-poor (Eurydice, 2016).

However, participating in online activities requires exchanging information with people worldwide, including strangers and friends. The security risk for data exchanged through a network is very high. According to Das (2011), every activity that might result in the loss of data, processing incompatibility, damage to computer hardware, or loss of information to software is a computer security risk. Develop protective behaviors to protect oneself, friends, family, and property while interacting with others online in order to have a happy online experience. According to Feldman (2017), it's critical to: (i) understand how to safeguard a computer against viruses and malware when utilizing the internet, (ii) understand the privacy concerns associated with networking, (iii) and the hazards associated with safety and security when using the Internet. These additional methods of displaying proficiency in digital communication activities are on the high side. The numerous proficiencies that should be displayed in a world of digital communication, including tertiary institutions, were among the topics Dixon (2019) typically covered. The ability to build relationships and facilitate organizing through the use of digital networks is ingrained in contemporary workplace communication.

HRIS expertise necessitates proficiency in digital communication. Communication is defined as the process of exchanging messages or information from a sender to a receiver (Fayol & Barnard, 2017). For instance, the secretary of a tertiary institution's head of department (HOD) can get a message from the sender asking for the minutes of the most recent departmental meeting. The secretary would then provide the HOD with the thorough minutes as feedback. In this case, the communication is internal (i.e. occurring between employees of an organization). The administrative manager must be able to use internet communication tools to communicate in the modern world. Therefore, the use of digital communication skills unites all the various organizational operations and ensures that every employee, regardless of location, is working toward the same objective. The success of the administrative system depends consequently critically on human resource information system skill. In the case of external communication, a company uses zoom, email, social media platforms, and other digital tools to reach people who aren't physically present in the learning environment.

The use of digital communication has greatly increased during the past several years. Data is physically transferred across Point-To-Point or Point-To-Multipoint communication channels in digital communication (Tapscott, 2018). Today's administrative managers need to be comfortable with computers, laptops, and the newest online communication tools in order to effectively interact both internally and outside. The majority of departments and units now have Whatsapp group chats where administrative updates and debates are done for the benefit of participants in order to boost

digital communication in the administrative system of tertiary institutions, particularly in light of the Covid-19 pandemic. It takes some amount of human resource information system skill to use such a platform.

Effective Personnel Administration

When operations are scheduled ahead of time and strict adherence to instructions is guaranteed, an administrative system is well-coordinated. In such a situation, office personnel are well-organized and follow the rules and routines rather than acting on impulse (Adebakin, 2012). The high level of synchronization makes it possible to complete everyday tasks like gathering, retrieving, and sharing information and data without any hiccups. This frequently leads to or assists in achieving an organization's higher goals, which may take the shape of revenues produced, expenditures avoided, revenues recovered, a percentage increase in a particular process, or something above and beyond the regular day-to-day tasks and obligations.

As was previously said, one indication that an administrative system is well-coordinated is in its capacity to complete goals and duties smoothly and on schedule. Due to the power context or pattern that flows from top to bottom, vertical organizational structure is characterized by hierarchy; in contrast, horizontal organizational structure occurs when there are greater preferences for specialization and involvement. The organizational structure changes as people are given more responsibility for their tasks, making it decentralized, flat, and flexible (Ronen et al., in Roth, 2016). Coordination is important regardless of how an organization is positioned. Coordination is a systemic process because it involves reaching the best option that can have positive internal and external repercussions. Coordination is a formal process because it is scientific; an informal process because it is people-oriented; and a systemic process because it involves science. An organization's or tertiary institution's ability to effectively coordinate is a sign of how effective the administrative system is. The goal of administrative machinery, as clearly stated by Clement (2018), is to organize and get office operations and activities well-coordinated. When a work schedule and all office operations are correctly and clearly planned to the point that work proceeds in an orderly fashion, that is the ideal state of effective coordination (Greg, 2020). In contrast side, inefficient coordination is the exact opposite of an ordered office system where tasks and duties are poorly coordinated. Such a work system is frequently characterized by confusion over who is responsible for which tasks, workers who are uninformed about events and changes to office schedules, and a general state of disarray due to poor recordkeeping and activity organization, asserted Jerry (2013).

Planning and coordination go hand in hand because they specify what should be in a good plan and how to carry it out. Because it takes the initiative, coordination is a component of organizing (Gulick & Urwick in Jerry, 2013). Because it determines who should be a staff member and the appropriate location, coordination is a component of staffing. Because it provides it a distinct focus, coordination is a component of directing. It's always coordinated. Reporting includes coordination because it makes it believable. Finally, budgeting includes cooperation since it improves its evaluation. Roles and responsibilities must be clearly defined in order for there to be successful coordination at work, particularly in hotels (Viinamäki, 2014). Roles organize employees and departments, which in turn structure the organization, according to Boella and Van-Der (2016). When talking about organization, wide and complex difficulties usually come up. In this way, coordination identifies when ethicality and reformation are most necessary. No collective good can often be achieved without some level of group consensus and coordination, as duty is best met by reciprocation (Provis, 2014). Therefore, coordination aims to address the why, how, when, and who of organization.

Effective planning, organizing, staffing, directing, reporting, and budgeting are still all included in the definition of efficient personnel management. Any business, including hotels, can only be regarded to have its activities successfully coordinated provided there is good planning and timely reporting to the appropriate parties. In the workplace, several elements of effective communication

must be present. Ansari (2019) claims that the following strategies can be used to achieve effective coordination in organizations like tertiary institutions:

- i. **Direct Contact:** Direct touch is one of the best ways to achieve synchronization. You can also use written communication, contemporary electronic devices, mechanical equipment, etc.
- ii. **Group Meetings:** Coordination is said to be accomplished most successfully through group gatherings. During the meeting, superior interacts directly with people involved in the actual issues. These gatherings urge participants to coordinate their activities. Meetings between bosses and subordinates on a regular basis can help with coordination.
- iii. **Organizational Structure:** Only when each person's authority and responsibilities are clearly established will coordination be possible.
- iv. **Effective Communication:** Effective communication is essential for attaining coordination. Coordination benefits immensely from communication. By bringing about and maintaining coordination, communication serves to foster a deep understanding of members in order to accomplish the overall objectives.
Effective communication, according to Ansari (2019), is the process by which thoughts and pictures from one person are communicated to another. Communication makes it possible for different people and activities to be coordinated. Information and idea exchange are facilitated by effective communication, which aids in achieving the shared objective. The sharing of these concepts and information facilitates coordination and brings individuals together.
- v. **Committees:** Different committees of different types may be created to coordinate the various activities. The mechanisms of synchronizing multiple efforts are provided by committees. In committees, the members' morale and understanding improve. They are primarily consultative in nature and employ the members' best efforts. The committee's makeup and operations have a significant impact on its success. Committees on manufacturing techniques, complaint committees, proposal committees for charity work, etc. are some examples of these committees.
- vi. **Staff Meetings:** Regular staff meetings allow for honest talks and a greater exchange of ideas among employees from various departments, which aids in developing effective coordination. This fosters a sense of community among the members, motivating them to collaborate and work for the organization.
- vii. **Effective Leadership:** Employees are made to feel collectively responsible and forced to cooperate by the leader. People in the group may have a variety of interests and objectives. Leader strikes a balance by resolving these opposing objectives. Coordination may be achieved at all levels by a good leader. Hence, creating coordination requires strong leadership.
- viii. **Informal Coordination:** Through processes of social, unofficial interactions, relationships, and mutual adjustments, many organizations establish informal forms of coordination. They are frequently more efficient than official channels.

The essence of management is effective personnel administration in order to promote harmony between individual effort and group effort (Narang, 2018). In the pursuit of a common goal, it is a method through which the administrator establishes a harmonious collective effort and unity of action. Planning, organizing, staffing, directing, and controlling are the fundamental administrative tasks that the administrator carries out when he initiates this process. An important aspect of effective personnel administration is coordinating and coordinating a group's operations. A coordinated operation is one in which all of the staff members are working in unison, tandem, and in support of a single goal. Effective personnel administration is the process by which an executive establishes a unit of action and achieves an organized pattern of group effort among his subordinates in the pursuit of a shared goal. Among others, the faculty dean, head of department, director, etc., are accountable for successfully and efficiently coordinating the institution's lower-

level staff. However, this study uses staffing, workflow management, and database management to further demonstrate effective personnel administration.

Person–Environment Fit Theory

Lewin and Edwards' Person-Environment Fit Theory gained popularity in 1962, as noted in Osita (2019). This theory, which is a theory of psychological stress, states that understanding people's cognitive, emotional, and behavioral reactions, such as stress, as well as operational productivity level, depends on how they interact with their environment (i.e., P E). The following are the pertinent presumptions of this theory that are regarded appropriate for this work:

A person's level of productivity could be hampered by tension and unease brought on by a mismatch between them and their workplace;

The capacity (skill sets) of the employee will decide the degree of workload and how the external environment will impact their production (Lewin and Edward as cited in Odu, 2018). This phase of the theory emphasizes how much the capacity of a tertiary institution head, such as a vice chancellor, rector, bursar, or registrar, to effectively and efficiently use any manifestation of HR Information System at their disposal will affect how stressful the work will be, as well as their effective time management, efficient personnel administration, and financial efficiency in the school.

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Research Design

The survey method was adopted for the study.

Population of the Study

The study concentrated on the Administrative heads of tertiary institutions in South-South, Nigeria. These formed the population under this study. For the study, the population was one hundred and eight (108) administrative heads from thirty-six (36) selected tertiary institutions (three universities, two polytechnics and one college of education) in South-South, Nigeria,

Sample and Sampling Technique

The sample size is maintained as one hundred and eight (108) administrative heads from thirty-six (36) selected tertiary institutions in South-South, Nigeria which is same as the population size.

Instrument for Data Collection

The research instrument for collecting data for this study was questionnaire. t.

Method of Data Analysis

The univariate analysis was done using mean and standard deviation while the bivariate analysis was done using Spearman Rank Order Correlation.

If our statistical analysis shows that the significance level is below the cut-off value we have set (which is 0.05), we reject the null hypothesis and accept the alternate hypothesis. Alternatively, if the significance level is above the cut-off value, the null hypothesis is accepted.

Results

Bivariate Analysis

Human Resource Information System and Administrative Effectiveness

- Ho₁: there is no significant relationship between skills in human resource information system and efficient personnel administration of heads of tertiary institutions in South-South, Nigeria.
- Ho₂: there is no significant relationship between skills in human resource information system and effective time management of Heads of tertiary institutions in South-South, Nigeria.
- Ho₃: there is no significant relationship between skills in human resource information system financial efficiency of administrative heads of tertiary institutions in South-South, Nigeria.

Correlations between Human Resource Information System and Personnel Administration

		HRI System	Efficient Personnel Administration	Effective Time Management	Financial Efficiency
Spearman's rho		1.000	.681**	.541**	.717**
	Correlation Coefficient				
	HRI System				
	Sig. (2-tailed)	.000	.000	.000	.000
	N	90	90	90	90
		.681**	1.000	.457**	.603**
	Efficient Personnel Administration				
	Sig. (2-tailed)	.000	.	.000	.000
	N	90	90	90	90
	Correlation Coefficient	.541**	.457**	1.000	.572**
	Effective Time Management				
	Sig. (2-tailed)	.000	.000	.000	.000
N	90	90	90	90	
Correlation Coefficient	.717**	.603**	.572**	1.000	
Financial Efficiency					
Sig. (2-tailed)	.000	.000	.000	.000	
N	90	90	90	90	

Source: SPSS Output

A significant level of 0.00 in column two of table above indicates a r value of 0.653, which is lower than the alpha level of 0.05 specified for the hypothesis relating to human resource information system expertise and effective personnel management. The null hypothesis (H_{01}), which asserts that there is no significant relationship between human resource information system skills and effective personnel administration of heads of tertiary institutions in South-South, Nigeria, was rejected because the significant level is less than the alpha level of 0.05. This suggests that expertise in human resource information systems and effective personnel management among heads of tertiary institutions in South-South, Nigeria, are strongly positively correlated.

The r value in column three of table above is 0.541 at a significant level of 0.00, which is lower than the 0.05 alpha level chosen for the hypothesis linking to proficiency with human resource information systems and efficient time management. The null hypothesis (H_{02}), which asserts that there is no significant relationship between human resource information system skills and effective time management of Heads of tertiary institutions in South-South, Nigeria, was rejected because the significant level is less than the alpha level of 0.05. This suggests that among the leaders of tertiary institutions in South-South, Nigeria, there is a significant positive link between knowledge of human resource information systems and efficient time management.

The r value in column four of table above is 0.717 at a significant level of 0.00, which is lower than the specified alpha level of 0.05 for the hypothesis relating to financial efficiency and human resource information system skills. The null hypothesis (H_{03}), which asserts that there is no significant relationship between human resource information system skills and financial efficiency of administrative heads of tertiary institutions in South-South, Nigeria, was rejected because the significant level is less than the alpha level of 0.05. This suggests that there is a strong positive correlation between administrative heads of tertiary institutions in South-South, Nigeria's human resource information system skills and their financial efficiency.

CONCLUSIONS

Administrators, such as the heads of tertiary institutions, can use the human resource information systems (HRISs) as real tools to carry out tasks like payroll computation, electronic recruitment and selection, information dissemination and retrieval, information storage, etc., resulting in efficiency, effective time management, and financial efficiency, among other things. Accordingly, the study comes to the conclusion that implementing human resource information systems, such as human resource support systems, human resource information system competencies, and human resource information system components, encourages administrative effectiveness, particularly in terms of efficient personnel administration, efficient time management, and efficient financial management. As a result, businesses like tertiary institutions who do not prioritize effectiveness in their administrative systems ought to, among other things, make these systems available and implement them.

RECOMMENDATIONS

Base on the findings of the study, the following recommendations are made:

1. Management of tertiary institutions should equip their administrators with human resource data collection and manipulation skills, so as to build on their data processing and information dissemination abilities.
2. Management should host on-the-job digital training sessions that will cover HR information retrieval and dissemination skills, and as well as HR decision and information storage skills, in order to enhance personnel administration.
3. Human Resource Management should utilize e-recruitment/selection in carrying out their recruitment and selection exercises, thereby promoting effective time management and efficient personnel administration.

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