Impact of Management Information Systems on Effective Human Resources Management in Tertiary Institutions in Rivers State

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ABSTRACT
This study investigated the use, impact and challenges to the use of Management Information System (MIS) in Human Resources Management (HRM) in federal and state tertiary institutions in Rivers State. The study involved a stratified random sample of all the 120 administrative staff of the Personnel Departments of the two sampled tertiary institutions (one federal and one state) in Rivers State. A 20-item questionnaire was designed, properly validated and used for data collection and the data was analyzed using mean and t-test statistics. The result shows that tertiary institutions are utilizing MIS for HRM to a moderate level and such utilization is impacting moderately on effective HRM. The use of MIS in HRM is moderately constrained by inadequate budget, infrastructural/support facilities and technical skills. The use of MIS for HRM is significantly more applied in state institutions, even though the use of MIS is more constrained and has significantly greater impact on effective HRM in federal institutions than in state institutions. The need to upgrade infrastructural facilities, budget and technical skills of staff to enhance effective use of MIS in institutional administration were recommended.

Keywords: Management Information System, Human Resources Management

INTRODUCTION
The term management is used differently depending on the context in which it is used. Agabi (1999) see management as the organization and mobilization of all the human and material resources in a system for the achievement of organizational objectives in the most rational manner. It is sometimes seen as a level of decision making within an organizational setting in the institutional level, Ebong and Agabi (2004) explained that “management” is referred to as the people who take decisions, formulate policies, influence others behavior and define organizational goals; “The staff” is referred to those who implement the institutional activities to goals.

Management in any organization is primarily based on the best way to deal with people in other to achieve organizational goals alongside with meeting the individual needs. Management is basically concerned with working through the human resource to accomplish organizational tasks. No wonder Asodike and Adième (2014) insisted that the attainment of institutional goals depends firmly on the attitude, skills and the managerial style of the administrators who must engage the people under them to deliver. Amadi (2003) therefore maintained the relevant for staff to be aware of the fundamental Principals of management as to enable them cope with their responsibilities effectively.

Human Resource Management is defined as the part of management process whose specialty is in the management of people at work place (Bratton and Gold, 2012). The people in the organization are the people that make things happen, they are the major asset of any organization. Asodike and Adième (2014) revealed that all the sophisticated machines, equipment cannot operate themselves and if not
utilized it will remain unproductive and wasteful. Koko (2005) supported the above with an assertion that “every unit of management be it financial or materials are unproductive without human intervention. This is hinged on why Okoroma (2014) noted that task oriented managers should not only focus on the job but also on the welfare of the employees, all the employees should be treated as valuable human resources, managers should be empathetic and not democratic in order to achieve the institutional goals.

Asodike and Adieme described human resource in educations as students, teachers, school managers, administrative staff in the ministry of education and non academic staff but insisted that the human resource manager in tertiary institution is the vice chancellor. Managers should exhibit good character knowing that the employee work to satisfy their personal needs and aspiration while the organizational needs must be accomplished. So it is of great importance for the managers, administrators to acquire good managerial skills to handle employees most efficiently for maximum production of educational goals. Koko (2005) define human resource management as the part of management which is concerned with the welfare of people at work place and their relationship.

In tertiary institutions, when you talk of human resource management, you think of management of students, lecturers, academic and non academic staff, knowing that the most difficult thing to manage is human. Every assessment of school effectiveness has the student achievements as a parameter Koko (2005). Therefore students are major human resources in tertiary institutions and should be properly managed to achieve positive results. No wonder Koko insisted that the success of every human endeavour is attributed to the quality of human resources that performs the different functions and tasks necessary to fulfill the goals. When the manager perform his duties in terms of staffing, directing, orientation, appraisal, compensation etc the goals of the institution will be achieved. Student an staff management in tertiary institutions is the major function of the school administrator, the head of the institution has a vital role to play when it comes to the human resource in tertiary such as, admission of students, grading of students result, accommodation of students, ensuring that student are taught, recruiting of competent teachers, payment of salaries as at when due etc.

According to Yusuf, Isyka & Kazeem (2014) Institutional Management Information systems should be planned to achieve the following:

- Enhance communication amongst employees.
- Deliver complex materials throughout the institution
- Provide an object procedure for recording and aggregate information
- Reduce expenses to labour intensive manual activities
- Support the institutional goals and directions

This enhances the overall decision making process, it provides the avenue in which the institutional activities are monitored, executed, controlled and information are distributed to management, supervisions, employees etc.

Information system is a major component of management in every organization that is used for dissemination of knowledge. MIS is a systematic way of providing the management with accurate and needful information necessary for decision making Okoroma (2014). The information systems is an essential factor of the human resource management in that it is human that collect, process, store and distribute information to support decisions made in the organizations.

Management information system is a procedure used to achieve the desired outcome and distribute information to support decision making and control in an organization. Hence, resources are scarce; it is the duty of the manager to manage the available resources to achieve optimum result. MIS processes includes, planning, organizing, controlling of software to store and retrieve in an accessible form. Wagner (2006) added that MIS is specifically designed to provide information that enables the organization compare actual reference with forecasted, projected and past results. However, it promotes the basis for plan adjustment and corrective measures. Adams, (2002) reported that MIS is focused on, daily, weekly and monthly summaries of transactions which is useful in monitoring and controlling of management activities.

**Statement of the Problem**

Management information system is the procedure used in the organization to achieve organizational goals in modern organizations, including tertiary institutions. Management of human resources in tertiary institutions remains a critical area in the drive towards achievement of institutional goals. For
this reason, many tertiary institutions are aggressively imbibing the culture of developing and utilizing management information system for many of the organizational activities, including human resources management. What is specifically bothering the researcher is the extent to which these institutions are utilizing management information system in their human resources management, what impact it is making on their human resources management and what challenges they are facing utilizing MIS in human resources management.

**Purpose of the Study**

The purpose of the study is to examine the impact of Management Information Systems (MIS) on effective Human Resource Management (HRM) in tertiary institutions in Rivers State. The objectives were specifically to:

1. Examine the level of utilization of MIS on HRM in tertiary institutions in Rivers State;
2. Determine the impact of MIS on HRM in tertiary institutions in Rivers State;
3. Examine the constraints to the use of MIS for effective HRM in tertiary institutions in Rivers State.
4. Compare federal and state tertiary institutions on their level of utilization of MIS in HRM, the impact MIS has made on HRM and challenges to use of MIS for effective HRM.

**Research Questions**

1. What is the level of utilization of MIS on HRM in tertiary institutions in Rivers State?
2. What is the impact of MIS on HRM in tertiary institutions in Rivers State?
3. What are the constraints to the use of MIS for effective HRM in tertiary institutions in Rivers State?

**METHODOLOGY**

Descriptive survey design was adopted for the study. The population for the study was made up of 180 administrative staff of the personnel Department of four tertiary institutions in Rivers State. The research utilized the stratified random sampling method to select one federal and one state tertiary institution for the study. The respondents included all the 120 administrative staff of the Personnel Department of the two sampled institutions. A twenty item questionnaire, designed by the researcher and structured on a four-point modified Likert-typed scale was used for data collection. The instrument was properly validated and tested for validity using the test re-test method, which yielded a Pearson Product Moment Correlation co-efficient of 0.722. Copies of the instrument were administered personally by the researcher to all administrative staff of the Personnel Department of the two institutions. A total of 105 out of the 120 copies of the instruments administered were retrieved and used for data analysis, using mean and t-test statistics at 0.05 significant level.

**FINDINGS**

**Research Question 1:** *What is the level of utilization of MIS on HRM in tertiary institutions in Rivers State?*

Analysis of data addressing this question is presented in Table 1.

**Table 1: Weighted mean assessment of the level of utilization of MIS in HRM in tertiary institutions in Rivers State.**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Areas of HRM</th>
<th>Federal Institution (n = 60)</th>
<th>State Institution (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Remarks</td>
</tr>
<tr>
<td>2</td>
<td>Personnel planning &amp; recruitment</td>
<td>2.17</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>Posting and job placement</td>
<td>2.88</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Supervision &amp; Monitoring</td>
<td>2.34</td>
<td>Low</td>
</tr>
<tr>
<td>5</td>
<td>Salaries &amp; pay roll management</td>
<td>3.33</td>
<td>Moderate</td>
</tr>
<tr>
<td>6</td>
<td>Personnel evaluation and promotion</td>
<td>2.07</td>
<td>Low</td>
</tr>
<tr>
<td>7</td>
<td>Personnel audit</td>
<td>3.62</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean</td>
<td><strong>2.57</strong></td>
<td>Moderate</td>
</tr>
</tbody>
</table>
The result of data analysis in Table 1 shows that both federal and state tertiary institutions in Rivers State are utilizing MIS for HRM to a high level only on personnel audit. They are utilizing it to a moderate level on posting and job placement and salaries and pay roll management. They are utilizing it to a low level in the area of personnel planning, supervision and monitoring and personnel evaluation/promotion. Their use of MIS on the aggregate level is however moderate (see means and remarks for each of the areas of HRM tasks in Table 1).

**Research Question 2:** What is the impact of MIS on HRM in tertiary institutions in Rivers State?

Analysis of data addressing this question is presented in Table 2.

**Table 2: Weighted mean assessment of the impact of MIS on HRM in tertiary institutions in Rivers State.**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Impact Variables</th>
<th>Federal Institution (n = 60)</th>
<th>State Institution (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Improvement in human resources performance</td>
<td>2.57 Moderate</td>
<td>2.52 Moderate</td>
</tr>
<tr>
<td>9</td>
<td>Reduction in cost of human resources</td>
<td>1.88 Low</td>
<td>2.22 Low</td>
</tr>
<tr>
<td>10</td>
<td>Elimination of fraud in human resources statistics</td>
<td>3.57 High</td>
<td>3.77 High</td>
</tr>
<tr>
<td>11</td>
<td>Efficiency in HRM</td>
<td>2.55 Moderate</td>
<td>2.65 Moderate</td>
</tr>
<tr>
<td>12</td>
<td>Saving of time in HRM</td>
<td>2.71 Moderate</td>
<td>2.51 Moderate</td>
</tr>
<tr>
<td>13</td>
<td>Improvement of personnel skills in HRM</td>
<td>2.53 Low</td>
<td>1.82 Low</td>
</tr>
<tr>
<td></td>
<td><strong>Aggregate Mean</strong></td>
<td><strong>2.64 Moderate</strong></td>
<td><strong>2.58 Moderate</strong></td>
</tr>
</tbody>
</table>

The result of data analysis in Table 2 shows that MIS has high impact on elimination of fraud and moderate impact on human resources performance, efficiency and time saving in HRM in both federal and state tertiary institutions in Rivers State. Their impact is however low cost reduction and improvement in personnel skills in HRM. The use of MIS for HRM is however having moderate impact on the aggregate scale on the two categories of institutions (see respective means and remarks in Table 2).

**Research Question 3:** What are the constraints to the use of MIS for effective HRM in tertiary institutions in Rivers State?

Analysis of data addressing this question is presented in Table 3.

**Table 3: Weighted mean assessment of the constraints to effective utilization of MIS in HRM in tertiary institutions in Rivers State.**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Possible challenges</th>
<th>Federal Institution (n = 60)</th>
<th>State Institution (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Inadequate MIS facilities</td>
<td>3.65 High</td>
<td>3.53 High</td>
</tr>
<tr>
<td>15</td>
<td>Inadequate technical skills in the use of MIS gadgets</td>
<td>2.67 Moderate</td>
<td>2.73 Moderate</td>
</tr>
<tr>
<td>16</td>
<td>Inadequate operational space</td>
<td>3.12 Moderate</td>
<td>2.88 Moderate</td>
</tr>
<tr>
<td>17</td>
<td>Reluctance to change among personnel staff</td>
<td>3.56 High</td>
<td>3.66 High</td>
</tr>
<tr>
<td>18</td>
<td>Irregular power supply</td>
<td>3.66 High</td>
<td>3.12 Moderate</td>
</tr>
<tr>
<td>19</td>
<td>Inadequate budget on MIS adoption</td>
<td>2.51 Moderate</td>
<td>2.61 Moderate</td>
</tr>
<tr>
<td>20</td>
<td>Lack of policy continuity on MIS adoption</td>
<td>2.52 Moderate</td>
<td>2.57 Moderate</td>
</tr>
<tr>
<td></td>
<td><strong>Aggregate Mean</strong></td>
<td><strong>3.10 Moderate</strong></td>
<td><strong>3.01 Moderate</strong></td>
</tr>
</tbody>
</table>
The result of data analysis in Table 3 shows that the constraints to the use of MIS for effective HRM in both federal and state tertiary institutions are inadequate facilities, budget, space and technical skills, reluctance to change, irregular power supply and lack of policy continuity (see respective means and remarks in Table 3). The aggregate scale is moderately on the constraints to the utilization of MIS for effective HRM in these institutions.

CONCLUSION
Based on the result of this study as presented and discussed, it is concluded that both federal and state tertiary institutions have not adequately adopted MIS in HRM to be able to have maximum impact on their HRM process due to some constraints. However, without addressing these constraints, the management of human resources will not be able to tap the full benefits of MIS adoption.

RECOMMENDATIONS
Based on the result of this study, the researcher recommends that tertiary institutions should provide adequate budget for MIS adoption in institutional management. This will provide funds for improving on the available MIS infrastructure and facilities, provide alternative power support, develop staff on MIS skills and motivate them to embrace modern management techniques that will improve their overall performance.

REFERENCES