Utilization of Information and Communication Technology for Job Delivery by Business Educators in Tertiary Institutions in Rivers State

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ABSTRACT
The study examined the extent of utilization of Information and Communication Technology for job delivery by business educator in tertiary institutions in Rivers State. The study adopted a descriptive survey design. The population comprised of 11 Business Educators from Rivers State University and 60 Business Educators from Ignatius Ajuru University of Education. Thus, the total population was 71 Business Educators. No sampling technique was used since the population was small. A structured questionnaire titled “Utilization of Information and Communication Technology for Job Delivery Questionnaire” (UICTJDQ) was used as instrument for data collection. Three experts validated the instrument while Pearson Product Moment Coefficient was used to establish the reliability coefficient of 0.89. 61 questionnaires only, were retrieved and used for the study. Two research questions and two null hypotheses tested at 0.05 level of significant guided the study. The items were rated on four (4) point rating scale; mean and standard deviation were used to analyze the research questions while analysis of variance was used in testing the formulated hypotheses. The findings revealed that though business education lecturers utilize Information and Communications Technology, they are yet to fully utilize Information and Communications Technology in all aspects of business education delivery due to certain challenges. The researcher therefore, recommended several strategies that will enhance the utilization Information and Communications Technology for the delivery of business education by lecturers in tertiary institutions in Rivers State.

Keywords: Information and Communication Technology, Business Education, Utilization, Job Delivery.

INTRODUCTION
Information and Communications Technology is technology that supports activities involving the creation, storage manipulation and communication of information, together with the related methods, management and application. In other words, Information and Communications Technology enables us to record, store, process, retrieve and transmit information. In line with this, Ubulom, Enyiket and Onukwe (2011) asserted that the emergence of information and communication technology has totally re-volutionalized the way we access, process, store, retrieve and disseminate information within organizations or across the globe. It encompasses modern technologies such as computer, telecommunication, facsimile and micro-electronics. Information and communication technology in today’s world refers to those technologies that determine the efficiency and effectiveness with which we communicate and the devices that allow us to handle information. Information and Communication Technology has become an imperative tool for administrative purposes in all fields. Kumar (2006) revealed that it is an umbrella term that includes communication device or application, comprising radio, television, cellular phones, computers, network, hardware and software, satellite systems and so on, as well as the various services and applications associated with them. Thus, Information and Communications Technology is useful in the various areas of education such as
teaching and learning, resource management, admission and examination processes also known as learning assessment. Utilization is the art of putting things or resources that are tangible or intangible to proper use. The utilization of Information and Communications Technology in the educational sector requires that teachers, lecturers and administrators must be skilled in the use of Information and Communications Technology facilities to improve their teaching methods and in terms of record management and administration. Lecturers should be adequately trained and regularly retrained to acquire the competencies and skills required for effective utilization of Information and Communications Technology in implementation of set objectives. Effective utilization can be possible with adequate provision of Information and Communications Technology facilities and infrastructure in the Business Education programme as well as adequate funding of the programme by government and all stakeholders. Asiya (2014) outlined the various ways of introducing technology in education institution administration as follows:

1. Sending e-mail notices and agendas to staff, rather than printing and distributing them.
2. Submission of lesson plans through e-mail.
3. Foster technology growth by asking parents to write e-mail addresses on medical forms.
4. Insist that all teachers create a class Web page.
5. Attend technology conferences to see what other schools are doing, what other teachers are doing to integrate technology, and what principals are doing to encourage the use of technology in their schools and classrooms.
6. Admissions through web-enabled services. All day-to-day activities of the institution (General Administration)
7. Staff administration.

Business education is an educational programme in institution of learning which offers individuals opportunity for gainful employment through the acquisition of skills and knowledge that affects the business world. Business education trains people to have the competencies of being employed or being self-reliant. Ubulom and Dambo (2016) asserted that Business education is a collaborative programme in which educational and industrial sectors of any economy form partnership thereby preparing the individual to adequately fit into both industry and classroom as a professional. Ubulom and Dambo stressed further that it is an aspect of the educational programme designed to provide an individual with the needed business and vocational attitudes, understanding, knowledge and skills.

Statement of the Problem
Researchers, government representatives, and the general public have expressed considerable concern on the need for the integration of Information and Communications Technology in the administration of tertiary institutions (Oboegbulem & Godwin, 2013). This is because when Information and Communications Technology facilities are provided and utilized, they reduce occupational stress and help in the day to day job delivery of workers.

The delivery of Business Education requires skilled personal that are competent in the use of Information and Communication Technology in other to produce graduates that are impacted with the required skills to fit into an automated office. However, researchers had argued the slow pace and none integration of Information and Communication Technology in Business Education and Ayoade, (2015) posited that there are inadequate Information and Communications Technology facilities in the college which institutional administrators can use to effectively perform different administrative duties. Nwaosa and Okolocha (2014) revealed that many Business Educators in tertiary institutions do not utilize e-learning technologies either for professional or academic purposes. Also, Okolocha and Nwadiani (2015) asserted that business education programmes in universities in south Nigeria lack adequate Information and Communications Technology resources hence not adequately utilized in the teaching of Business Education courses. Thus, the researcher examined the extent of utilization of Information and Communications Technology for job delivery by Business Educators in tertiary institutions of Rivers State.

Purpose of the Study
The main purpose of this study was to examine the extent of utilization of Information and Communications Technology for job delivery by Business Educators in tertiary institutions of Rivers State.
Specifically, the study sought to:
1. Determine the extent to which Business Educators utilize Information and Communications Technology for delivery of their administrative duties.
2. Determine the extent to which Business Educators utilize Information and Communications Technology for delivery of their academic duties.

**Research Questions**

The following research questions guided the study:

1. To what extent do Business Educators utilize Information and Communications Technology for delivery of their administrative duties?
2. To what extent do Business Educators utilize Information and Communications Technology for delivery of their academic duties?

**Hypotheses**

The following null hypotheses were tested:

1. There is no significant difference in the mean responses of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their administrative duties.
2. There is no significant difference in the mean responses of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their academic duties.

**METHODOLOGY**

The research design used in conducting the study was descriptive survey. The population for the study was all 71 Business Educators drawn from the Rivers State University (11) and Ignatius Ajuru University of Education (60) all located in Rivers State, Nigeria. No sampling technique was used for the study, since the population was small. The instrument used for data collection was a structured questionnaire titled “Utilization of Information and Communication Technology Job for Delivery Questionnaire” (UICTJJDQ). The instrument provided response to the two research questions with 10 items; Item 1-5 answering research question one and item 6-10 answering research question two in a 4-point rating scale weighted as “Very High Extent” (VHE) – 4 points, “High Extent” (HE) – 3 points, “Low Extent” (LE) – 2 points and “Very Low Extent” (VLE) – 1 point. To establish the validity of the instrument, the questionnaire was subjected to face and content validity by two experts from the Department of Business Education and one from Measurement and Evaluation, all of Faculty of Education in Rivers State University. To ensure the consistency of the instrument, the test-retest method of reliability at an interval of 14 days was adopted. The Pearson Product Moment Correlation was used to process the result. A reliability coefficient of .89 was obtained. Only 61 copies of the questionnaire were retrieved and used for the study. The data analysis was done using the mean to analyze the research questions while z-test was used to test the hypotheses. The mean was obtained by the summation of all responses as assigned to a rating scale in an item divided by the total number of responses: \( \frac{4+3+2+1}{4} = 2.50 \). The mean score of 2.50 and above was accepted, while those below 2.50 were rejected.
RESULTS
Research Question 1
To what extent do Business Educators utilize Information and Communications Technology for delivery of their administrative duties?

Table 1: Mean Ratings on Extent to which Business Educators utilize Information and Communications Technology for delivery of their administrative duties  N=61

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statements</th>
<th>RSU (10)</th>
<th>IAUE (51)</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X STD</td>
<td>X STD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>I use the internet to disseminate information to students/staff via bulk SMS platform.</td>
<td>3.52 0.73</td>
<td>3.48 1.00</td>
<td>3.5 0.87</td>
<td>VHE</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I send/receive official mails via the internet.</td>
<td>3.46 0.80</td>
<td>3.36 1.09</td>
<td>3.41 0.95</td>
<td>VHE</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I use mobile phone for easy communication with staff and students.</td>
<td>3.44 0.80</td>
<td>3.41 1.03</td>
<td>3.43 0.92</td>
<td>VHE</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I use computer for processing of official documents.</td>
<td>3.52 0.72</td>
<td>3.46 0.97</td>
<td>3.49 0.85</td>
<td>VHE</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Computers are used to store/retrieve official data.</td>
<td>3.49 0.75</td>
<td>3.44 0.99</td>
<td>3.47 0.87</td>
<td>VHE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grand Mean/SD</td>
<td>3.49 0.76</td>
<td>3.43 1.02</td>
<td>3.46 0.89</td>
<td>VHE</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work, 2019.

The data in table 1 shows the various average mean scores of 3.50, 3.41, 3.43, 3.49 and 3.47 which implies that the respondents agreed to using the internet to disseminate information to students/staff via bulk SMS platform; sending and receiving official mails via the internet; using mobile phone for easy communication with staff and students; use computer for processing of official documents as well as using Computers to store and retrieve official data. The table also revealed a grand mean of 3.46 and a grand standard deviation of 0.89 which indicates that Information and Communication Technology is highly utilized for delivery of administrative duties by Business Educators in Rivers State University and Ignatius Ajuru University of Education.
Research Question 2
To what extent do Business Educators utilize Information and Communications Technology for delivery of their academic duties?

Table 2: Mean Ratings on Extent to which Business Educators utilize Information and Communications Technology for delivery of their academic duties
N=61

<table>
<thead>
<tr>
<th>S/N</th>
<th>Statements</th>
<th>RSU (10)</th>
<th>IAUE (51)</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>STD</td>
<td>X</td>
<td>STD</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Internet enabled computers are used for sourcing of lecture materials.</td>
<td>3.37</td>
<td>0.83</td>
<td>3.32</td>
<td>0.96</td>
<td>3.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VHE</td>
</tr>
<tr>
<td>7.</td>
<td>I give/retrieve students assignments via email.</td>
<td>3.42</td>
<td>0.73</td>
<td>3.34</td>
<td>0.95</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VHE</td>
</tr>
<tr>
<td>8.</td>
<td>Projectors are used for lecture delivery.</td>
<td>3.52</td>
<td>0.73</td>
<td>3.43</td>
<td>0.96</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VHE</td>
</tr>
<tr>
<td>9.</td>
<td>Internet is used for research work.</td>
<td>3.49</td>
<td>0.75</td>
<td>3.41</td>
<td>1.03</td>
<td>3.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VHE</td>
</tr>
<tr>
<td>10.</td>
<td>Computers are used to collate and prepare student’s scores.</td>
<td>3.55</td>
<td>0.70</td>
<td>3.48</td>
<td>1.00</td>
<td>3.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VHE</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean/SD</strong></td>
<td><strong>3.47</strong></td>
<td><strong>0.75</strong></td>
<td><strong>3.40</strong></td>
<td><strong>0.98</strong></td>
<td><strong>3.44</strong></td>
</tr>
</tbody>
</table>

Source: Field work, 2019.

The data in table 1 shows the various average mean scores of 3.35, 3.38, 3.48, 3.45 and 3.52 which implies that the respondents agreed that internet enabled computers are used for sourcing of lecture materials; they give and retrieve students assignments via email; projectors are used for lecture delivery; internet is used for research work and that computers are used to collate and prepare student’s scores. The grand mean of 3.44 and grand standard deviation of 0.87 revealed that Information and Communication Technology is highly utilized for delivery delivery of academic duties by Business Educators in Rivers State University and Ignatius Ajuru University of Education.

**Hypothesis 1**
There is no significant difference in the mean ratings of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their administrative duties.
Table 3: z-test Result on Extent to which Business Educators utilize Information and Communications Technology for delivery of their administrative duties

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Df</th>
<th>z- Cal Value</th>
<th>z- Crit Value</th>
<th>L/Sig</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU</td>
<td>10</td>
<td>3.49</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAUOE</td>
<td>51</td>
<td>3.43</td>
<td>1.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work, 2019.

The data in Table 3 above revealed a z-calculated value of 0.72 which is less than the standard z-critical value of 1.96; thus, the null hypothesis was accepted. The result therefore is that there is no significant difference in the mean ratings of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their administrative duties.

**Hypothesis 2**

There is no significant difference in the mean ratings of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their academic duties.

Table 4: z-test Result on Extent to which Business Educators utilize Information and Communications Technology for delivery of their academic duties

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Df</th>
<th>z- Cal Value</th>
<th>z- Crit Value</th>
<th>L/Sig</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSU</td>
<td>10</td>
<td>3.47</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAUOE</td>
<td>51</td>
<td>3.40</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work, 2019.

The data in Table 4 above revealed a z-calculated value of 0.87 which is less than the standard z-critical value of 1.96; thus, the null hypothesis was accepted. The result therefore is that there is no significant difference in the mean ratings of Business Educators from Rivers State University and Ignatius Ajuru University of Education on extent to which Information and Communications Technology is utilized for delivery of their academic duties.

**DISCUSSION OF FINDINGS**

The findings on research question 1 indicated that the respondents accepted that Information and Communications Technology facilities are used for information dissemination, communicating, processing of official documents, storage and retrieval of information, sending emails by lecturers of business educators in the institutions studied. This implies that Information and Communications Technology is highly utilized for administrative duties by Business Educators. This finding does not agree with Ayoade (2015) who revealed that there are inadequate Information and Communications Technology facilities in the college which institutional administrators can use to effectively perform different administrative duties; this may be as a result of the efforts put together by relevant stakeholders in ensuring the integration of Information and Communication Technology in education.

The findings on research question 2 indicated that the respondents accepted the statement that the use of projectors for academic activities, internet for research work, computers for collation and preparation of scores and are used for sourcing of materials on internet and issuing/retrieval of assignments by business education lecturers in the studied institutions. This implies that Information...
and Communications Technology is highly utilized for academic duties by Business Educators. This finding disagree with the findings of Nwaosa and Okolocha (2014) and Okolocha and Nwadiani (2015) who revealed in their different studies that Business Educators rarely utilize e-learning technologies such as; hardware, Software and internet technologies in teaching Business Education courses in tertiary institutions.

CONCLUSION
Information and Communication Technology is an umbrella term that includes communication device or application, comprising radio, television, cellular phones, computers, network, hardware and software, satellite systems and so on, as well as the various services and applications associated with them. Information and Communications Technology is useful in various areas of education such as teaching and learning, resource management, admission and examination processes also known as learning assessment. Against all odds, Business Educators are ensuring the use of Information and Communication Technology in the delivery of their administrative and academic duties.

RECOMMENDATIONS
Based on the findings, the following recommendations were made:

1. Business education lecturers should endeavour to utilize Information and Communications Technology in all aspects of their administrative and academic duties as this will enhance their job delivery.

2. Government and stakeholders should endeavour to provide the necessary Information and Communications Technology facilities to enhance the delivery of Business Education programme.

REFERENCES