IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN A UNIVERSITY OFFICE ADMINISTRATION SYSTEM

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ABSTRACT
In today’s highly globalized and liberalized competitive world, the internet and ICT has become a part and parcel of human life. And, hence the educational sectors cannot be kept away from usage of ICT. Distance is no more the barrier, due to the invention of internet and various ICT’s. Today’s academia is also undergoing into this turbulent change. To enhance the process of education rendering to the aspirants, this calls for a major and important role of ICT to play. Thus in the functioning of in a university office administration system, ICT is becoming a mandatory element. The use of ICT which will bring quicker communication, faster data processing, better information retrieval, which will lead better decision making, and to have control in the overall administration of an university system.

KEYWORDS: ICT, University administration system, Data processing, Information retrieval, Decision making.

INTRODUCTION
Information and Communications Technology (ICT) 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, ICT enables us to record, store, process, retrieve and transmit information. It encompasses modern technologies such as computer, telecommunication, facsimile and micro-electronics. Older technologies such as document filing systems (registers, journals, files, etc.), mechanical accenting machines and printing are also included in the term information technology.

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 (ICT) has become a key tool in acquiring, processing and disseminating knowledge. It has become a very important tool for development of a nation in the 21st century. The revolutionary impact of ICT on all spheres of the society has not spared the educational sector.

Education is a necessary in today’s’ knowledge-based economy. The generation and use of new knowledge requires more educated population, ICT is playing a major role in the acquisition and rendering of knowledge, which are fundamental aspects of the education process. It is offering, increasing possibilities absent teaching and for invocation in teaching activities through being able to deliver learning cognitive activities anywhere at any time. The availability of the internet has given rise to an electronics approach to the educational system, called e-learning. Tertiary educational institutions have always being at the fore-front of new scientific discoveries and innovation brought about by the activities of teaching, learning and research. E-learning is becoming increasingly primest in tertiary education, e-learning is being delivered on the platforms of ICT infrastructure promise to widen access to education and at reduced cost. Apart from electronics learning ICT infrastructure are being widely use to support teaching, learning, administration and research activities in tertiary installation, such infrastructure include personal computers, specialized software, handheld devices, interactive volute board, intranet and visual literary.

In a university office system the ICT is used in various administrative sections which includes student administration, staff administration and for making correspondence while doing general administration. Student administration is an important and integral part of administration. This involves various activities starts from the admission process, fees collection, conducting various courses to that of conducting examinations and finally declaring results and to have analysis to measure the performance of student. The induction of ICT into this process may enhance the overall above mentioned activities. Staff administration includes recruitment of staff and work allotment to this staff, it also includes recording of attendance of employee and leave management, to have performance appraisal. This overall process needs to have communication between the higher authorities with that of involving peers. The usage of ICT helps in staff administration, while processing of voluminous data, saves time and enhances the information retrieval process. In brief, ICT will have significance impact on the overall general administration of higher educational institutions, which includes the various day-to-day activities of the entire system.

Rational / Theoretical Frame Work of ICT
The internet is now widely used as a medium of communications arrange administration researchers and
student in higher institutions. There are many desirable attributes of information and communication technology (ICT). Each of them concerns the effective provision of information to the recipient. These include purpose accuracy factorial, volume of information volume of detail and presentation of information.

The term administration is regarded as the process of utilizing human and imperial resources in accomplishing designating objectives; this could be done by organization, direction co-coordinating and evaluating programmer in a bid to actives goals or objectives. In a social process, there is always a structure inerrably comprising the subordinates and super ordinals.

As such, the primary function of management is to take decisions fact for specific to the achievement of organizational objectives. The types of decisions management will determine it information needs, however the numerous crises in they are higher instatement could have been prevents if information and communication Technology will promote issues on student admission student records and transcript examination records and transcript, examination records, teaching, research and community services it has also been observed that the monitoring and evaluation of staff, physical plant planning curriculum development, financial management and information dissemination will increase the efficiency of the university office administration, if information and communication Technology facilities are adequately and properly initialized.

**The Conceptual Framework of ICT**

The need for a shared conceptual framework. No matter how dispersed and diverse it has been, the international ICT literacy movement has always shared the idea, formulated more or less explicitly, that it is necessary to reach a new information and communication technology awareness. This media awareness would help us to achieve two key goals:

a) Ascertaining the importance and influence of the ICT system in our everyday life and

b) Developing the competences needed to use the communication technologies bearing human goals and values in mind.

In this way, ICT awareness would serve to further access to technologies and the appropriation of the instruments, codes and languages that enable information to be received created and disseminated and that empower people to actively participate in society. In essence, it would be one way in which competences, freedoms and responsibilities would be balanced to respond to the demands of the new Information and communication technology scenario. It is also acknowledged that this ICT awareness should be critical. This is both because it should provide systems for evaluating and selecting information, and because, from a broader standpoint, it should be critical of technological development. However, it must also be purposeful and active, meaning that it should give rise to two kinds of criticism: criticism of ICT messages and criticism of their technological context. Thus, ICT awareness must in turn further citizens’ free expression of ICT Literacy and New Humanism with the goal of strengthening social communication and their right to take decisions autonomously. Finally, this ICT awareness should further exchange and mutual understanding among cultures and it should stimulate the attainment of universal rights and the acceptance of universal responsibilities. So how do we arrive at this ICT awareness? The answer is by promoting ICT literacy. Countless experts, researchers, governments and international institutions believe that only the spread of new ICT competences and a high enough degree of the new skills required among the population — that is, until they achieve a proper level of ICT education — is going to move humanity forward in its path toward achieving the ICT awareness that it needs. However, problems arise when we consider the dispersion and diversity of perspectives within which the ICT literacy movement has unfolded up to this point.

The objectives, styles and forms of action have been so diverse that their effectiveness has often suffered and the coordination of the diverse actors has been quite sub-par. Therefore, it seems clear that in order to move toward the new ICT awareness, the first thing needed is to develop a certain consensus, as broad as possible, around the basic concepts that define and organise ICT awareness and ICT education. Therefore the goal, to the extent possible, is to develop a shared conceptual framework that is capable of integrating all of the different perspectives into a single horizon.

**Objectives of the Study**

The objectives of this research study are as follows:

- To study the scenario of how ICT has been implemented into university system
- To study existing situation in the sections where operations are carried out manually
- To study the impact of ICT in various sections of university administration
- To conduct a survey by taking an opinion about the use of ICT from university employee to their daily routine work

**Purpose of the Study**

The purpose of this study is to have a critical analysis of the impact of information and communication technology (ICT) in a university administration system. Moreover ICT plays an important role in the university administrative functioning.

**1.5. Hypothesis of the Study**

Ho – The performance of university does not depends on effective administration system

**RESEARCH METHODOLOGY**

Data will be collected by sample survey method. Survey conducted from ICT user’s employee of university office administration. Data will be enter into the excel sheet, for further processing, by applying the statistical techniques, methods and to have bring the relevant inferences.

**Research Design**

The survey design will be used in this study because it is considered appropriate for collecting data from a given population with an intention to determine the opinion, attitudes and perception of personnel considering the variables under study.

**Population of Study**

The population consists of all the office administrative section from university these are taken from:
Sampling Procedure

The census sampling technique is used in the selecting of samples. In this survey there are almost all the 19 sections from university office administration will be covered. All the section particulars will be shows in above table no.A1. Each of the section and employees in that particular section in university administration will be selected by using census sampling method. The study involves different categories of ICT tools makes use of day-to-day administrative work.

Instrumentation

The instruments consist of two sections A and B. Section A sought data on the demographic characteristics of the respondents as regard their administration section name, respondent name, sex, designation, qualification and work experience. In the requested data on factors that determine the impact of ICT in a university office administration system. There are twenty five structured multiple choice questions. And final 25th of question attitudinal rating scale of strong agreed (SA), agreed (A), disagree (D), neither agree nor disagree (NA/ND), and strong disagreed (SD) are used.

| Strong Agree | 5 |
| Agree | 4 |
| Strongly Disagree | 3 |
| Disagree | 2 |
| Neither agree nor disagree | 1 |

The respondents were required to tide each item in the appropriate column that mostly represents their opinion based on their degree of agreement or disagreement with the relevant statement.

Table no. A. The computer atomization helps in office administrative work

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>The computer atomization helps</th>
<th>Total no. of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
<td>SA in %</td>
</tr>
<tr>
<td>1</td>
<td>Reduces your problems</td>
<td>210</td>
</tr>
<tr>
<td>2</td>
<td>Faster data processing</td>
<td>188</td>
</tr>
<tr>
<td>3</td>
<td>Faster decision making</td>
<td>172</td>
</tr>
<tr>
<td>4</td>
<td>Provide high security to information</td>
<td>178</td>
</tr>
<tr>
<td>5</td>
<td>Reduce paper work (less paper work)</td>
<td>141</td>
</tr>
<tr>
<td>6</td>
<td>Save time and enhancing information retrieval process</td>
<td>164</td>
</tr>
<tr>
<td>7</td>
<td>The performance of university depends on effective administration system</td>
<td>210</td>
</tr>
</tbody>
</table>

According to the above table it replicates that the computer atomization helps in university office administration system. The 100% respondent strongly agree for computer atomization really helps to reduces problems arising in the administrative work. Also all the entire 210 respondent strongly agree with the performance of university depends on effective administration system. Out of the 210 respondents there are 188 respondent are strongly agree with the ICT helps in faster data processing, while only 22 respondents just agree with the same. There are 178
respondent responses that they strongly agree for providing high security to information while only 32 respondent responses just agree with the same statement. In another case there are 172 respondent responses they strongly agree with the ICT helps in faster decision making, while only 36 respondents responses they agree for the same. In the case 6 out of the 210 respondents there are 164 respondents strongly agree for save time and enhancing information retrieval process while 46 respondents just agree with the same statement. There are not a single respondent responses that they are disagree, strongly disagree and neither agree nor disagree for any of the seven cases shown in the table no.2. According to overall discussion the above table no.20 replicates that the ICT helps in university office administration for various purposes. It means that the performance of university depends on ICT and ICT is a most important and essential part in office administration.

RESULT AND DISCUSSION
The performance of university does not depend on effective administration system. For this hypothesis testing, we use |z|-test by taking observations of strongly agree.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Particulars</th>
<th>SA</th>
<th>SA%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reduces problems</td>
<td>210</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Faster data processing</td>
<td>188</td>
<td>89.52</td>
</tr>
<tr>
<td>3</td>
<td>Faster decision making</td>
<td>172</td>
<td>81.9</td>
</tr>
<tr>
<td>4</td>
<td>Provide high security to information</td>
<td>178</td>
<td>84.76</td>
</tr>
<tr>
<td>5</td>
<td>Reduce paper work (less paper work)</td>
<td>141</td>
<td>67.14</td>
</tr>
<tr>
<td>6</td>
<td>Save time and enhancing information retrieval process</td>
<td>164</td>
<td>78.09</td>
</tr>
<tr>
<td>7</td>
<td>The performance of university depends on effective admin. system</td>
<td>210</td>
<td>100</td>
</tr>
</tbody>
</table>

**|z|-test for computer atomization helps in university office administration system**

<table>
<thead>
<tr>
<th>Sample mean</th>
<th>180.4286</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard deviation (S.D)</td>
<td>529.6735</td>
</tr>
<tr>
<td>Sample size</td>
<td>210</td>
</tr>
<tr>
<td>The probability distribution</td>
<td>0.5 normal</td>
</tr>
<tr>
<td>The calculated value of</td>
<td>2.06345</td>
</tr>
<tr>
<td>The critical value of</td>
<td>1.64</td>
</tr>
</tbody>
</table>

Therefore the calculated value of |z|-test > the critical value of |z|-test

i.e. **2.06345 > 1.64**

**Therefore the hypothesis (Ho) rejected.**

i.e. the performance of university depends on effective administration system. The performance of university does not depend on effective administration system. We are assuming hypothesis the performance of university does not depend on effective administration system, but the actual result getting after calculating the performance of university depend on effective administration or not. And according to the above table there are 100% respondents responses with strongly agree with this statement so, we conclude here the performance of university depends on effective administration system. Therefore, The calculated value of |z|-test > the critical value of |z|-test

**2.06364 > 1.64**

Therefore hypothesis (Ho) rejected. The performance of university depends on effective administration system.

**IMPLICATION OF STUDY**
Since the study revealed that there is positive relationship between ICT and administrative competence of university. The study also found that the ICT provide the effective solution for problems arising in administration. The ICT provide more secrecy for data and information in administration. The university should be well informed about the capacity building of human resources at their disposal. This study also found that by making use of ICT it increases faster data processing as well as faster decision making is to be reliable and valid. Implication of ICT helps university administration to reduce paper work or less paper work and finally the study found ICT increases overall performance of university administration.

**REFERENCES**
1. Information and Communication Technology (ICT) in Nigerian Educational System Agbetuyi, P. A. Mediterranean Journal of Social Sciences Vol. 3 (3) September 2012, ISSN 2039-2117


10. Integrated Information Technologies for Integrated Tourism and Local Economy Management Source: Mansel &When (1998)


