

# Cloud Computing and the Internet Usage, Its effect on Learning among Students: A Case of Federal University Dutse.

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## ABSTRACT

The information and communication technologies (ICT) is fast developing all over the globe resulting to evolution of Cloud computing and the Internet technologies, to the extent that students and other users are realizing the advantages of cloud computing in learning processes and use of Internet by obtaining relevant information with regard to the learning process as well as its effect on learning. Cloud computing makes use of internet technology as a means of delivering resources for use and has classifications such as Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a service (IaaS) in accordance to the classification of service delivered which will not necessarily be imaginable without the internet for access globally. Also, the process of storing and accessing data and programs over the Internet as an alternative of computer hard drive which makes use of Internet and as representation for the Internet. Internet refers to a global network of interconnected computers through which users can have access to World Wide Web. The study paper investigates the level of Cloud Computing and the Internet usage among students of Federal University Dutse (Nigeria). A Survey Research Methods was implemented in the research that comprises of the Interview and Questionnaires, Simple Random Sampling technique was also used, in randomly selecting some sample of respondents from total population of the target audience. The Data collected in the research paper is analyzed using frequency distribution and percentage, result findings and recommendations are given to avoid psychological distress among students.

**Keywords:** Cloud Computing, Internet, Internet benefit and its effects, Students/Learning

## I.INTRODUCTION

The rapid development of internet in recent years is becoming a leading aspect in human life (Addul Razaque Chhachhar, et al 2017). Moreover, the internet is gradually increasing the use of Information and Communication Technology (ICT) and brings an innovative path in education and communication. Due to the advancement of these technologies (Cloud Computing/Internet), information for students and other users can be acquired effortlessly with a click of a mouse using a computer system. Definitely, the use of internet has

developed rapidly in the Nigerian's education system particularly for the tertiary institutions. Internet usage had changed the way of life in many educational institutes for students globally. Most of universities in Nigeria have brought the development and implementation of innovative teaching strategies (Ojo Adejare Akintunde, Ilugbiyin Olalekan Ayodeji 2014). The Internet has come with an advancement that cannot be compared with existing technologies that were before it. Students can use the cloud in data storage as well as Internet for their assignments and other related usage but in turn create psychological distress due to its negative effects. At present, the development in telecommunication infrastructure has led to growth in Internet connectivity. More users and students get connected to the Internet through their individual mobile smart phones. However, the students makes use of the Internet regularly for e-mail, searching information and to some extent on social media activities that comprises of online chatting in whatsapp, facebook and many others; all of these were found to have an important influence on their academics, social being and at the same time affect them psychologically leading to poor performance. Cloud computing makes use of internet technology as a means of delivering resources for use and has classifications such as Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a service (IaaS) in accordance to the classification of service delivered which will not necessarily be imaginable without the internet for access globally and cloud computing as a process of storing and accessing data and programs over the Internet as an alternative of computer hard drive, this enable easy and speedy access by students.

## **II.BACKGROUND OF THE RESEARCH**

The Federal University Dutse (FUD) is one of the universities created by the Federal Government of Nigeria in 2011. FUD offers both undergraduate and postgraduate programs as well as PhD (Wikipedia, 2017). The University's campus is located in the ancient town of Dutse the capital of Jigawa State. FUD is offering a broad range of degree programs in Humanities, Natural and the Social Sciences, Agricultural Science and also in Medicine which all requires the use of cloud in storing data and information as well as Internet for access to information. Most of the staff and students in the universities make use of Internet related e- learning website in order to find the related information for their research (Manir Abdullahi Kamba, 2015). Students have also been using e-mail as a means of storing records and information in the cloud and Internet for various usages.

However, University education is considered as a mechanism of social, political and economic development (Olutola, Adekunle Thomas, 2015). The products of higher education in any nation will determine the development of such nation. Therefore, higher education contributes to national development through high level significant manpower training; in order to obtain both physical and intellectual skills which qualify individual to be self-reliant and useful members of the society. Learning as the process of acquiring innovative or modifying existing knowledge, behaviors, skills, values, or preferences, is some time distracted by the internet technology usage. The Internet usage is in the higher increase among university students, resulting to psychological effect in both moral and academic performance. Evidently, with the universal access to information and an interactive

mechanism to communication that is offered by the Internet, it is very simple to know why students all over the world are addicted to its usage.

### **III.EFFECT OF CLOUD COMPUTING AND INTERNET USAGE AMONG STUDENTS**

So many technological innovations evolved as an Internet invasion like E- Commerce, E- Business and E- Learning. Students makes use of cloud computing technology in storing images, videos and music for entertainment instead of using it in storing relevant information of learning.

There is absolutely no doubt about the benefits provided by the use of cloud computing and Internet in our everyday life. However, there is an increasing concern emerging from the growth of this universal system. It is about the negative effects of Internet usage in the part of learning among students, following are some effect which directly or indirectly affects students.

- **Lack of Creativity in Learning:** lack of creativity in students is a negative effect of Internet usage, when everything is available; there is no need for creativity. Students now don't have to pay much attention to lectures and effort on their assignment or project because they only need a little time to get all information they need from the Internet then copy paste into their work. This problem is a warning for the increase in plagiarism, leading to the lack of creativity.
- **Lack of control over information sources:** One significant feature of Internet is the unlimited sources of information. This feature benefits students and users by quick access to needed information at ease, the same situation happen to not only students but also to users at any age. Things get easier in a way that it becomes a hindrance for learning and creativity.
- **Time waste:** Students often waste most of their time browsing internet instead of using it as a source of access to information for learning activities.
- **Internet addiction and Physical Development:** most students became addicted to internet usage which in turns hinders their physical development, to some extend that they can't really do anything without it resulting to psychological distress among students.

These effects are mentioned more frequently than ever according to (William Lynch, 2017). These problems really affect the learning outcome of many students in higher educational institutions.

### **IV.METHODOLOGY**

The research study described in this paper was carried out at the Federal University Dutse (FUD) in Jigawa State Nigeria. The main purpose of the research paper is to study the effect of cloud computing and internet usage in learning among students of the university. Survey research method was adopted for the study, interview and questionnaire were the instruments used for the data collection (Descriptive Research Design). The main purpose of descriptive research is description of the state of affairs as it exists (C R Kothari and Gaurav Gang, 2016). In a descriptive study, the researcher can make use of the results acquired from the sample to make generalizations about the whole population only if the sample is actually represent the population. Descriptive research design was suitable for this study because the study involved collection of quantitative and qualitative

data from a various respondents by interviewing and questionnaire distribution to a sample of individual's respondents. The sample size of the study was 125 respondents (students) drawn from the faculties in the university. Simple random sampling was used to select the students from the faculties.

Data was gathered from the distributed questionnaire and interview from students with regards to the benefit and effects of cloud computing and internet usage in learning, to find out whether it really affects the students or not. The data collected from questionnaire was analyzed using MS Excel while the interviews were used in the discussions and concepts of the research.

**V.RESULTS AND DISCUSSION**

In Results and Discussions, we present the results that evolved from the research study and discuss the findings. The study data were collected using data collection instruments like questionnaire and interview as discussed previously. The data collected using the questionnaire and interviews were analyzed. The respondents (students) generally acknowledged that there are several effects that obstruct their academic performance in addition to internet usage. Out of the 125 respondents (students) targeted in this study, only about 100 respondents completed and returned the questionnaire while the remaining questionnaire were either not returned or spoiled, so only those questions filled correctly are recorded.

The results from questionnaires shows that students who are of the age range of 18-25 years has the highest percentage of 51%, while male students are much higher compare to female students as well as 89% of the respondents frequently make use of Internet. (Q1, 2 and 3 in the Figure 1 below)

On the other hand an average of 47% uses Internet for social networks instead of using it for assignment and learning purposes. Whereas, 47% spent 1-3 hours using internet per day, 14% each uses 3-7 and 5-7 hours per day, only 21% and 19% of the respondents uses internet for assignment and learning purposes which shows Internet usage drastically affect the students. (Q4 and 5 in Figure 2 below)

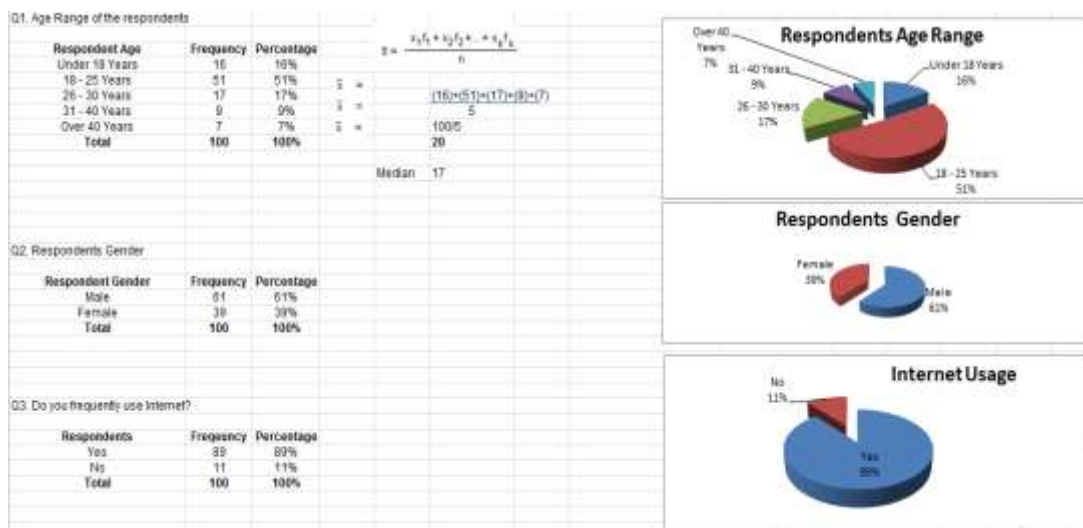


Figure 1: Q1, 2 and 3

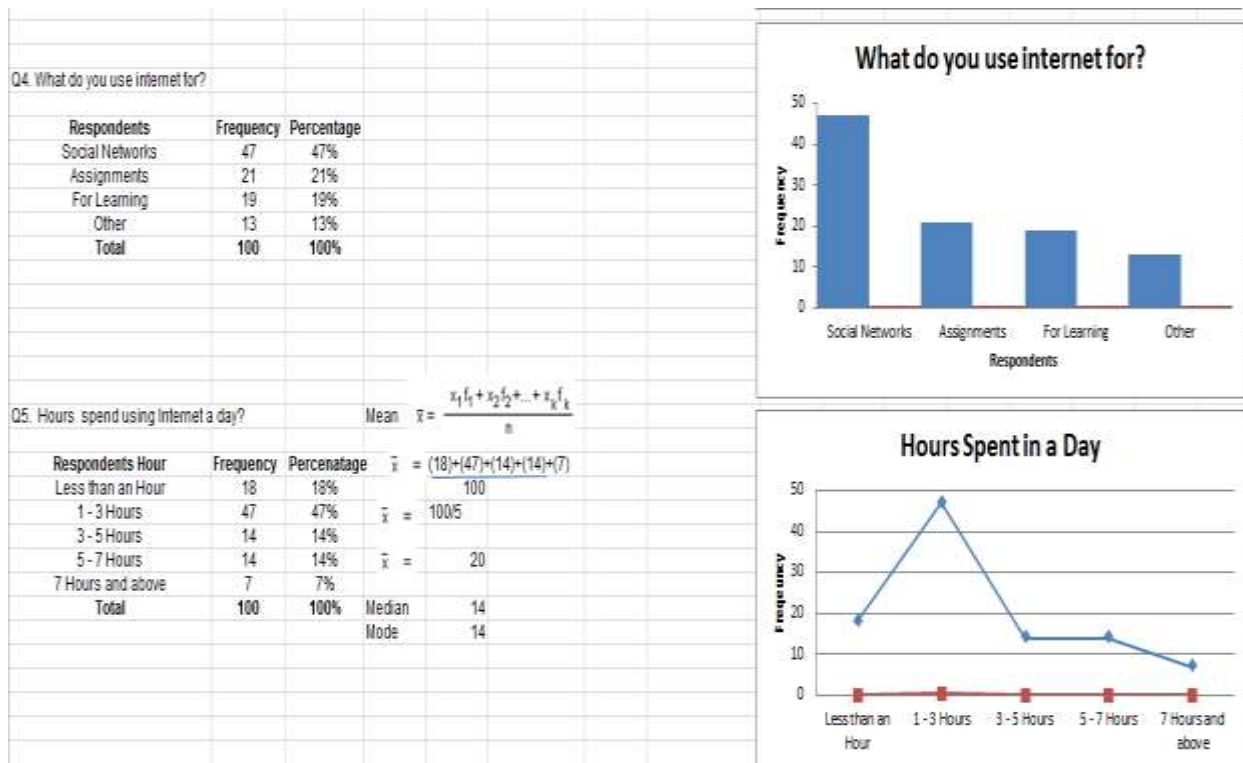


Figure 2:Q4 and 5

## VI.CONCLUSION

Conclusively it is stated that students makes use of cloud computing and internet technology in storing images, videos and music for entertainment instead of using it in storing relevant information of learning. There is absolutely no doubt about the benefits provided by the use of cloud computing and Internet. But, there is an increasing concern with regards to its frequent use which leads to negative effects of Internet usage in the part of learning among students like lack of creativity in Learning, lack of control over information sources, waste of time, Internet addiction and physical development. These problems really affect the learning outcome of many students in FUD and in other higher educational institutions. Therefore as part of the recommendation for this research the University Management has to regulate the use of Internet as well as Smartphone in the campus and also enlighten students on the positive side of using the cloud and internet for their studying needs which will help in improving their academic performance and reduce the psychological distress among the students.

## REFERENCE

- [1.] Bahman Yasbolaghi Sharahi, Azam Ahmadi, Tayebe Goodarzi, Fatemeh Havas Beigi and Jaber Joukar (2014) A Survey of the amount of Internet Usage among High School Students of Khafr County and its Impacts on Students. Published by Procedia-Social and Behavioral Sciences, Volume 114, February



- 2014, Pg 610-616. Accessed online from  
<https://www.sciencedirect.com/science/article/pii/S1877042813053950>
- [2.] Addul Razaque Chhachhar, Ghulam Mujtaba Khushk, Ayaz Ahmed Chachar, Barkatullah Qureshi (2017) Internet Usage among University Students in Pakistan. Published by Journal of Basic and Applied Scientific Research. Accessed online from  
[https://www.researchgate.net/publication/256456652\\_Internet\\_Usage\\_among\\_University\\_Students\\_in\\_Pakistan](https://www.researchgate.net/publication/256456652_Internet_Usage_among_University_Students_in_Pakistan)
- [3.] Ojo Adejare Akintunde, Ilugbiyin Olalekan Ayodeji (2014) Assessment of internet usage amongst Nigerian students — A case study approach. Published in Industrial Technology (ICIT), 2014 IEEE International Conference. Accessed online from <http://ieeexplore.ieee.org/abstract/document/6895021/>
- [4.] [https://en.wikipedia.org/wiki/Federal\\_University\\_Dutse](https://en.wikipedia.org/wiki/Federal_University_Dutse)
- [5.] Manir Abdullahi Kamba (2015) Problems, Challenges and Benefits of Implementing E-learning in Nigerian Universities: An Empirical Study. Accessed online from <http://online-journals.org/i-jet/article/view/653>
- [6.] Olutola, Adekunle Thomas, Olatoye, Olufunke Omotoke (2015) Challenges of E-learning Technologies in Nigerian University Education. Published in Journal of Educational and Social Research, MC SER Publishing, Rome-Italy, Vol 5 No.1 January 2015. Accessed online from <http://www.mcser.org/journal/index.php/jesr/article/viewFile/5623/5426>
- [7.] William Lynch (2017) Negative effects of Internet on Education
- [8.] C R Kothari and Gaurav Gang, (2016) Research Methodology – Methods and Techniques (Third Edition) Published by New Age International Publishers.