

Chapter 13

An Application of the UTAUT Model for Understanding Acceptance and Use of ICT by Nigerian University Academicians

N. D. Oye

Universiti Teknologi Malaysia, Malaysia

N. A. Iahad

Universiti Teknologi Malaysia, Malaysia

Nor Zairah Ab Rahim

Universiti Teknologi Malaysia, Malaysia

ABSTRACT

This study examines the acceptance and use of ICT by Nigerian university academicians. The model validated is the Unified Theory of Acceptance and Use of Technology (UTAUT). Using a pilot study, one hundred questionnaires were administered and collected at the University of Jos Plateau State, Nigeria. The construct was significantly correlated with behavioral intention (BI). This implies that the university ICT system makes tasks easier to accomplish, thereby making academicians more productive. The survey shows that 86.5% agree. Effort expectancy (EE) was significantly correlated with BI. The result shows that 84.3% agreed that they could use ICT. Among the four UTAUT constructs, performance expectancy exerted the strongest effect. The UTAUT model shows age effects for older workers and a stronger willingness for the younger workers to adopt new IT products. According to this study age and gender do not have significant effect on acceptance and use of ICT. Performance expectancy (PE) and Effort expectancy (EE) are found to be the most significant predictors of academic staffs' acceptance of ICT and use.

DOI: 10.4018/978-1-4666-1957-9.ch013

INTRODUCTION

Information and communications Technology (ICT) has the potential to improve all aspects of our social, economic and cultural life. The introduction of ICT into universities clearly changes the way education is conducted. ICT also paves way for a new pedagogical approach, where students are expected to play more active than before (Alabi, 2004). ICT focuses on the crucial issues of how people communicate and learn in electronic environment. ICT in learning depends on effective communication of human knowledge, which may either occur in synchronous or asynchronous and blended learning situation as the case may. The role of Information and Communications Technology (ICT) in human development has received growing attention among development practitioners, policy makers, government and civil society in recent years due to the growing proliferation of the Internet, convergence in IT and telecommunication technologies and increasing globalization.

According to Bandele (2006), ICT is a revolution that involves the use of computers, internet and other telecommunication technology in every aspect of human endeavour. Ozoji in Jimoh (2007) defined ICT as the handling and processing of information (texts, images, graphs, instruction etc) for use, by means of electronic and communication devices such as computers, cameras, telephone. Ofodu (2007) also refers to ICT as electronic or computerized devices, assisted by human and interactive materials that can be used for a wide range of teaching and learning as well as for personal use. From these definitions, ICT could therefore be defined as processing and sharing of information using all kinds of electronic device, an umbrella that includes all technologies for the manipulation and communication of information. This new development is a strong indication that the era of teachers without ICT skills are gone. Any classroom teacher with adequate and professional skills in ICT utilization will definitely have his students perform better in classroom

learning. Teaching and learning has gone beyond the teacher standing in front of a group of pupils and disseminating information to them without the students' adequate participation (Ajayi, 2008).

The ICT facilities used in the teaching learning process in schools according to Bandele (2006), Bolaji (2003), Bryers (2004), and Ofodu (2007) include; radio, television, computers, overhead projectors, optical fibers, fax machines, CD-Rom, Internet, electronic notice board, slides, digital multimedia, video/VCD machine and so on. In fact some of the facilities are not sufficiently provided for teaching – learning process in the institutions of learning. Undoubtedly, this might account for why teachers are not making use of them in their teaching.

In Nigeria the available infrastructure for ICT in most of these universities are grossly inadequate. It was observed that most university students still visit internet off campus because of too much demand on the internet on-campus. The bandwidths shared on most of these systems at cyber Cafés are still low, hence much time is still wasted on internet browsing. Olaniyi (2006) was of the view that most of the institutions of higher learning in Nigeria have started building their ICT centres but they focus mainly on internet facilities without considering other components that make up ICT Centre. However ICT infrastructure has not been the priority of government. Government policy has been the deregulation of telecommunication industry. ICT infrastructures are therefore mostly provided by private entrepreneur for business purpose (Akinsola, Marlien, & Jacobs, 2005).

Adoption of ICT in Higher Education Institutions

In developing countries Nigeria precisely, preliminary investigations show that only a few organizations in the economy have adopted the IT, but there has not been formal study to determine the level of diffusion and the factors affecting its efficiency on organizations. Achimugu, Oluwag-

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/application-utaut-model-understanding-acceptance/68546

Related Content

The Sociotechnical Nature of Mobile Computing Work: Evidence from a Study of Policing in the United State

Steve Sawyer and Andrea Tapia (2005). *International Journal of Technology and Human Interaction* (pp. 1-14).

www.irma-international.org/article/sociotechnical-nature-mobile-computing-work/2865

On User Experience Measurement Needs: Case Nokia

Pekka Ketola and Virpi Roto (2009). *International Journal of Technology and Human Interaction* (pp. 78-89).

www.irma-international.org/article/user-experience-measurement-needs/4100

Mental Health, Post-Secondary Education, and Information Communications Technology

Jenny Martin and Elspeth McKay (2013). *Human Rights and Information Communication Technologies: Trends and Consequences of Use* (pp. 196-213).

www.irma-international.org/chapter/mental-health-post-secondary-education/67755

Understanding Consumers' Behaviour when Using a Mobile Phone as a Converged Device

Po-Chien Chang (2011). *Emerging Pervasive and Ubiquitous Aspects of Information Systems: Cross-Disciplinary Advancements* (pp. 49-62).

www.irma-international.org/chapter/understanding-consumers-behaviour-when-using/52430

Clinical Forensic Issues in Child Trauma Stemming from Juvenile Fire Setting and Bomb Making: Culturally Responsive Risk Assessment and Treatment Paradigm for Rural Settings

Ronn Johnson, Karla Klas, Eric Jacobs, Elizabeth Grace and Alejandra Murillo (2017). *Gaming and Technology Addiction: Breakthroughs in Research and Practice* (pp. 716-737).

www.irma-international.org/chapter/clinical-forensic-issues-in-child-trauma-stemming-from-juvenile-fire-setting-and-bomb-making/162543