

# Chapter 19

## Adoption and Use of Innovative Mobile Technologies in Nigerian Academic Libraries

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### ABSTRACT

*The research explores the extent to which academic libraries in Nigeria are using mobile technologies for the delivery of its information and research services, and the impact these technologies may have on the professional development needs of librarians. Using a mixed method design approach, two data sets were investigated. First, the web-based library homepages of 15 tertiary education libraries in South-west Nigeria were examined for their level of conformance to a mobile platform and second, library staff from the 15 academic libraries were surveyed for their perceptions of, and experiences in, using mobile technology both within a social context and within the workplace. This research found that while mobile technologies are in use by the majority of academic libraries to a degree, lack of resources and awareness of new innovations were identified as barriers to providing mobile services that meet users' needs and expectations.*

### INTRODUCTION

Several studies support the notion that the rapid advancement and increased popularity and access to mobile technologies for leisure significantly influences the teaching and learning landscape; shifting the boundaries of digital literacy into a wireless learning environment accessible anywhere and any-time (Johnson, et al., 2011; Laurillard, 2007; Wiebrands, 2012). Additional research further suggests, whilst students may or may not carry portable computers to schools, they almost always carry mobile phones (Awoyemi, 2016, Lippincott, 2010; United Nations Educational Scientific and Cultural Organization, 2012). For example, in a study conducted by the researcher on innovative library services for undergraduate student in Adeyemi College of Education, ondo, mobile apps and tablet computing is significantly relevant to the future of teaching, learning and research; proposing likely adoption for the

DOI: 10.4018/978-1-5225-2953-8.ch019

tertiary sector within one year (Awoyemi, 2016). These findings suggest information will be retrieved from multiple online resources, alluding to the use of both formal and informal information networks within collaborative learning spaces.

Universities all over the world are cited as exemplars of mobile apps in practice clearly indicating these technologies are actively used and supported within the education sector (Johnson, et al., 2011). Interestingly, Adeyemi College of Education (ACE) library and many other libraries, have modelled mobile apps in practice and they all have good results (Awoyemi 2016, Boopsie Inc, 2012a, 2012b; Johnson, et al., 2011). ACE, library have adopted wireless computing network access to accommodate tablet computers; considered a new category of mobile device tipped as the learning tool of choice for learner engagement outside of the classroom

A recent mobile consumer trends report from Google indicates that over 60% of students in Tertiary institutions globally currently own a smartphone and that 80% of smartphone users actively utilise their mobile phone to locate information (ITU, 2012). Freedom of mobility (80%) and access to social networks (77%) rated highest amongst smartphone users (ITU, 2012). Interestingly, 38% of participants surveyed, the largest group identified, held an undergraduate or postgraduate degree suggesting mobility and connectedness is valued by students. In addition, 11% of participants identified their current employment status as student (ITU, 2012) suggesting that Nigerian learners, are familiar with, or comfortable using, smartphone technology to locate, identify, retrieve and evaluate information of interest.

## **Problem Statement**

Mobile devices and their associated technologies are becoming common-place in today's connected society; impacting on the information seeking behaviour of individuals and signalling a change in the nature of information access. Increased costs associated with technology infrastructure, and the need to keep pace with technology has seen a shift in how Nigerian Educational Institutions, at all levels, maximises its use of available technological resources. If the education model for the 21st Century learner has evolved, the flow-on effect for the academic libraries within Nigeria must be considered.

In a recent study of information-seeking behaviours of University staff and students, academic librarians at McGill University found the advancing nature of mobile technologies altered the information literacy landscape for its patrons; resulting in the need for, and development of, a modern hybrid literacy programme that detailed the benefits of mobile technology use within an academic library environment (Canuel, Crichton, & Savova, 2012). This example highlights the changing nature of information access for the 21st Century and suggest academic librarians need to be aware of these advances, and the impact it may have on their role as educator.

In Nigeria, Osun State Secondary Schools, have opted to employ a policy "Opon imo" (tablet of knowledge) as a means to manage technology infrastructure within their own institutional settings and engage with an ever-changing technological environment (Punch Newspaper, June 3, 2016). Learners' within these environments will be mobile-savvy and, when transitioning to higher education, may have an expectation that the tertiary sector will follow the same educational learning model. The implication of directional change and a shift in the educational learning model for the tertiary sector therefore is significant. Nigeria academic libraries, as practitioners of information literacy education, will implement a shift in traditional service delivery to better serve the needs of its learners and validate its relevancy within the wider academic environment.

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