



# Measuring the Constructs That Influence Student and Lecturer Acceptance of an E-Library in Accra Technical University, Ghana

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## ABSTRACT

Even though many universities across the world have incorporated internet-based educational and academic systems, the success of their implementation requires an extensive understanding of the end user acceptance process. Access to academic resources for teaching and learning using technology (electronic library) has become a popular approach within higher education institutions due to the continuous growth of internet innovations and technologies. This case study research, conducted at Accra Technical University uses the technology acceptance model (TAM) as a theoretical framework. The study investigates the effects of the system characteristics such as appropriate user interface (UI), software design, and relevance towards the perceived ease of use and perceived usefulness on intention to use the proposed e-library system. Two hundred (200) students and sixteen (16) lecturers participated in this quantitative study. Results show that improvement of the existing e-library system in ATU will enable students to utilize digital learning resources for effective teaching and learning, especially during the current global COVID-19 pandemic.

## KEYWORDS

Accra Technical University (ATU), Electronic Library, ICT in Education, Technology Acceptance Model

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## 1. INTRODUCTION

A library is a place, a facility or an area where there is huge collection of books and various academic resources that are made available for reading and reference purposes. The function of a library is to implement, enrich and support educational programmes in an academic institution (Balanli, Ozturk, Vural, & Kucukcan, 2007; Carlile, 2007; Jiao & Onwuegbuzie, 2002; Jiao & Onwuegbuzie, 2017). The primary objective of the library material selection is to provide materials that will stimulate students' acquisition of factual knowledge, development of literary appreciation, aesthetic values and ethical standards (Battle, 2004; Keefer, 1993). Furthermore, the objective of the library material selection is to provide a source of information which when consulted, may enable students to make informed judgements. Hence the role of the library is to support students' information needs by providing relevant resources and services effectively. At some point of their university education, students will find it necessary to use the library to access and retrieve information for either research or learning needs (Abusin & Zainab, 2017; Balanli et al., 2007; Carlile, 2007; Jiao & Onwuegbuzie, 2002).

Nowadays, human productivity is made more effective through technology and process of research is more effective through the use of technology. Computers are not only used for entertainment only but for educational purposes as well which yield better results than the previous ways of doing things. Hence there is a need for an e-library to aid students achieve better results in their research (Jiao & Onwuegbuzie, 2002; Jiao & Onwuegbuzie, 2017).

The term "E-library" refers to a library that is ubiquitous and available anytime and anywhere, allowing users to access it over the Internet via their personal computers, mobile computers, and mobile devices (Hwee & Yew, 2018; Jeong, 2011; Park, Roman, Lee, & Chung, 2009). An E-Library satisfies the basic requirements for every academic activity and is also an essential source of information. E-library is also a collection of information and services that help end users to deal with information objects, available directly or indirectly through electronic or digital devices. The functions of an e-library system include searching books in the library, finding and downloading the e-books and e-journals, ordering and purchasing books, etc. The major advantages of an e-library over the traditional library are the resources stored in digital form are easier to keep track, it can be fast and equitable for remote access to e-library collections, and it allows users to use the search engine to locate the desired resources (Yusoff, Muhammad, Zahari, Pasah, & Robert, 2009; Jeong, 2011; Park et al., 2009). The use of an e-library is handier for researchers and students which helps in saving valuable time. The emergence of e-libraries is convenient to students and other users during their learning life (Hwee & Yew, 2018; Jeong, 2011; Park et al., 2009; Yusoff et al., 2009).

Due to computerized information, an e-library reduces pressures of returning books to their shelves after being used, checking in and out books and organising materials. It also helps students to easily locate their preferred resources with ease. An e-library also has an interface that will help students to operate the system easily. E-libraries are easy to use from any Internet connected personal computer or mobile device. An e-library system is usually shared with each of the departments and faculties in academic institutions. The staff and students have their own accounts to access and use the functions or services in an e-library. The resources that e-libraries provide include: e-books, e-journals, online electronic resources, etc. Students can use the search function in an e-library to search and save the desired books into a cart, access online database to read and download the e-books and e-journals, search and check the status of their requests (Hwee & Yew, 2018; Jeong, 2011; Park et al., 2009; Yusoff et al., 2009; Rajagopal & Chinnasamy, 2012).

According to Yusoff et al. (2009); Hwee & Yew (2018), e-libraries have been developed rapidly with substantial investments, but previous research indicates that many users still do not make use of it. Currently, academic libraries are shifting from the traditional print (hard copy) resources into electronic resources (e-resources) and maintain such resources as institutional repositories. Such e-resources include theses and dissertations and other innovative academic work done by faculty or students (Radjagopal, 2012).

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