Chapter 13
Adoption and Maintenance of the Next Generation Integrated Library Systems (ILS) in Academic Libraries

Regina Balengane Sikhosana

https://orcid.org/0000-0003-2427-2847
Durban University of Technology, South Africa

Mogiveny Rajkoomar
Durban University of Technology, South Africa

Sentoo Ramnarain Naresh
Durban University of Technology, South Africa

ABSTRACT

The next-generation library integrated systems (ILS) are becoming increasingly popular throughout the world. However, determining appropriate decision-making aids for the implementation and maintenance of the next-generation ILS is complicated and difficult to manage. This chapter is based on a systematic literature review related to the adoption and maintenance of next-generation ILS in academic libraries published between 2016-2022. Roger's diffusion of innovation (DoI) was used as a framework to examine ways of understanding and accepting new technologies. Existing research indicates that academic libraries in South Africa are using next-generation ILS to ensure interoperability between the various systems, platforms, and devices that are part of modern library systems. Despite its potential benefits, there are significant barriers to the adoption of ILS such as lack of technical knowledge and skills in using emerging technologies and the perception among LIS professionals worldwide that they will negatively impact their jobs and lead to unemployment.

INTRODUCTION

The use of Information and Communication Technologies (ICTs) to execute operations like acquisitions, reference services, cataloguing, and serial control is known as library automation, large-scale open-source library automation systems can improve bibliographic production efficiency (Ponelis & Adoma, 2018). In most academic libraries globally, the integrated library system (ILS) continues to be the most popular information system for library automation (Grammenis & Mourikis, 2020; Ahmat et al., 2018) The previous traditional ILS has become obsolete and is no longer capable of handling the increased number of electronic or digital resources; libraries usually had to deploy other tools for search and discovery of their e-resources (Liu & Fu, 2018).

Although new systems acquisitions are foremost in choosing library service platforms, recent developments show that most academic libraries continue to rely on integrated library systems with Ex Libris Alma now experiencing mass adoption (Grammenis & Mourikis, 2020). Innovative offers several Integrated Library Systems (ILS) including Sierra and Polaris, but the ILS academic library market is less populated than the ILS public library market; The introduction of FOLIO, an open source learning management system based on the concept of flexibility, with a variety of modules available (and interchangeable) as required, is recently being considered for adoption by most academic libraries (Association of College and Research libraries, 2020). Grammenis and Mourikis (2020) further state that "the next-generation library integrated system (ILS) was developed as a separate system in the sense of electronic resources management systems (ERM) to help libraries organize and provide electronic resources".

In the history of academic libraries globally there is a story and a high level of acceptance of the introduction of the next generation ILS. Previously, traditional ILS were only designed to manage printed materials, creating difficult situations where libraries separated their workflows and staff from the traditional workflow (Liu & Fu 2018). In contrast to ten years ago, only a few academic libraries are involved in separate procurement projects for search services accepting the discovery product that comes with its LSP (Library Service Platform) namely: Primo with Alma or World CAT Discovery Service with World Share Management services or using a partnership between its ILS provider and one of the Discovery Service Providers, usually EBSCO Information Services (Breeding, 2016).

In the literature, a few studies of ILS implementation at specific institutions, including Uganda, have been reported (Ponelis & Adoma, 2018), Nigeria (Omeluzor & Oyovwe-Tinuoye, 2016; Moruf & Ngozi, 2020, USA (Yeh & Walter, 2016) and South Africa (Atua-Ntow, 2016), Uganda (Polines & Adoma, 2018), Canada (Liu & Fu, 2018), Iran (KardanMoghaddam,2022), India (Balaji, 2021), Greece (Kouis,2020; Grammenis & Mourikis, 2020). Even though libraries have studied the global impact of new technologies, there is still a lack of literature on the adoption and maintenance of next-generation ILS in academic libraries (Adegbore, 2018). The purpose of this chapter is to learn more about how next-generation ILS is being used in academic libraries in South Africa. To consolidate existing research on these impediments, employs Roger's diffusion of innovation (DoI) theory as an organizing framework to provide a structured overview and synthesis of existing research (Rogers, 2003).

The next generation of ILS is hosted "in the cloud," cloud computing can be considered as a model for providing convenient, on-demand network access to a shared pool of configurable computing resources such as networks, servers, storage, applications, and services (Adegbilero-Iwari & Hamzat, 2017). As academic libraries became more aware of the limitations of various ILS, technology companies began developing library management systems that could address those shortcomings more effectively. The difference between traditional and next-generation ILS is that the latter has an open architecture and

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