

Jordan Learning Analytics Management Systems Innovation (Jordanian Universities)

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ABSTRACT

Learning management systems (LMS's) are a necessary tool and well suited as learning tools and activities in higher education. However, each institute has a different LMS tool that allows to users (management, instructors and students) to use it for a daily activity. This article investigates the main factors for the acceptance of LMS at Jordanian universities. It also presents a new LMS model for Jordanian context called Learning Management System Model (JLMS). This approach is used to identify important factors that could or do affect the acceptance of using an LMS at Jordanian universities.

KEYWORDS

Jordanian Learning Management System JLMS, Jordanian Universities, Learning Analytics, Learning Management System LMS

INTRODUCTION

In the last few years, the use of information technology (IT) has received interest from people in every walk of life (Majdalawi, Almarabeh, & Mohammad, 2014). At the present, IT based tools are not only used for business and daily activities, but also for university education, where it is used to manage different academic activities (Denscombe, 2014). A learning analytics system (McDaniel, Fanfarelli, & Lindgren, 2017) is software that is used in administration, reporting and other training exercises (Al-Dmour, 2014). The research question is: "What are the factors for the acceptance of analytics in learning management system at Jordanian universities?" This paper aims to identify the factors that impact on the acceptance of analytics in learning management system at Jordanian universities. This paper also investigates the literature on LMSs in many different contexts of learning analytics and the research methodology for the study is also presented.

Learning analytics are widely used at universities for streamlining teaching and learning tasks, as they effectively manage learning tools and resources for user participants (students and teachers) (Kats, 2010). A phenomenal revolution has occurred in the university education over the past decade as a result of learning analytics, as they have been found to significantly benefit students' understanding

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and academic progress (Alnsour, Muhsen, Dababnah, Eljinini, & Barhoum, 2011). LMS applications are multifunctional, enabling students to have ubiquitous access to systems, watch lectures, download course materials and upload assignments online (AlQudah, 2014).

The latter provides convenience to students as never before and is conducive to study. To have efficient functioning of learning analytics, it is necessary to enable well-established links between data that is indexed by search engines, and web bots that connect and bind information together (Babić, 2012). LMS empowers users and offers a greatly enhanced user experience overall (McIntosh & Torres, 2014; Phillippe & Krongard, 2012).

A learning analytics greatly simplify learning and deliverables, such as tests, assignments and other forms of assessment, with the use of multimedia applications that incorporate team learning through dynamic, real time, documented collaboration. Some examples include the use of chat, file transfer and assessment applications. A learning analytics create new platforms for the active learner and results in greatly expanding the learning curve. To fully understand the nature and implications of different LMSs, it is vital to explore exactly what the LMS context is (Ahmad, Chinade, Gambaki, Ibrahim, & Ala, 2012). This study is based on the most recent and related literature explaining various scenarios where learning analytics address learning issues in the digital environment in a way that was not possible in the previous confines of print logics.

RESEARCH QUESTION

To address the research question, research question (what are the factors for the acceptance of analytics in LMS at Jordanian universities?) will determine the factors that impact on the acceptance of analytics in learning management system at Jordanian universities. This will be achieved through an investigation of the impact of LMS tools within different contexts on the research participants. The results of the investigation will reveal the factors influencing LMS use by the user participants. It is anticipated that the answers to these questions might be revealed from the aspects discussed below.

The first aspect is the social and cultural issues (Hofstede, Minkov, & Hofstede, 2016), which are very important because the culture of each country will influence how the LMS is used in that country. Infrastructure is another aspect that influences LMS use and refers to the availability and accessibility of technology, such as the availability of technology like PCs and Internet connections, and the accessibility of technology like access to the Internet and access to LMS tools. These two main aspects are the factors that may influence the use of analytics in learning management system at Jordanian universities (Majadlawi, Almarabeh, & Mohammad, 2014).

There are other factors that affect the use of an LMS, such as linguistic barriers, where there may be lack of understanding of the technology languages and commands. Additionally, a well-designed learning analytics system or LMS should have a reassuring and intuitive user interface that promotes confidence among potential users. Another factor that influences LMS use is technical support and how easy the system is to use (Davis, 1989). Some managers use incentives to encourage users to dedicate time to training, and develop resources to encourage the user to use the new system (Al-Shboul, 2013). Finally, the lack of training for technology professionals and the interactive and synchronous collaboration tools can influence the level of use of an LMS (Al Qudah, 2014; Davis, 1989).

RESEARCH PROBLEM

The single most significant barrier mentioned by Al Bakri (2013) is the lack of understanding of how to perform online transactions and progress system workflows. There exists a perceived mistrust of electronic operations and new “process improvement” software because in Jordanian culture, people are still afraid to use new technology and do transactions online, and they prefer and trust the use of paper instead of the electrical process. Therefore, this current research assesses the level and lack thereof of

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