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EXAMINING THE EFFECT OF LEARNING MANAGEMENT SYSTEMS (LMSS) ON PART-TIME LECTURERS' TEACHING PRACTICES AT A SOUTH AFRICAN UNIVERSITY OF TECHNOLOGY

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Abstract

The growing adoption of learning management systems (LMS) in higher education institutions has profoundly influenced teaching and learning practices. This study aims to investigate the impact of LMS on part-time lecturers' teaching methods at a South African University of Technology. It will explore the challenges and barriers that these lecturers encounter when integrating Learning Management Systems (LMS) into their teaching, as well as the benefits and opportunities that these systems afford. This research investigates the influence of constructs from the Technological Acceptance Model, specifically Perceived Usability (PU) and Perceived Ease of Use (PEOU), on the adoption and effectiveness of Learning Management Systems (LMS) in educational settings. Employing a qualitative research methodology, the study conducted focus group interviews to examine part-time lecturers' perceptions regarding the use of Learning Management Systems (LMS) within the university. Data was collected from a purposive sample of eight participants. Preliminary findings suggest that part-time lecturers view the Learning Management System (LMS) as a valuable tool for enhancing course content management, facilitating communication, and providing timely feedback to students. The insights gained from this research will contribute to a deeper understanding of the role of learning management systems in enhancing the teaching practices of part-time lecturers and guide the effective implementation of these systems in South African higher education institutions.

Keywords: *Learning management systems, teaching practices, part-time lecturers, technological acceptance model, university of technology.*

1. Introduction and background

Over the past decade, the educational landscape has undergone a significant transformation, with e-learning emerging as a fundamental component of contemporary pedagogy. The integration of technology into teaching and learning has revitalized traditional methodologies, creating a dynamic and adaptive platform that transcends geographical boundaries (Al-Chalabi & Hussein, 2020). In this context, part-time instructors play a crucial role in delivering high-quality teacher education at universities of technology. However, the implementation of Learning Management Systems (LMS) presents new challenges that can impact instructional efficacy and overall satisfaction among educators.

Key impediments to successful LMS implementation include limited professional development, insufficient institutional support, and the difficulties educators face in balancing teaching responsibilities with other obligations. Consequently, lecturers must cultivate a robust understanding of educational technology tools to enhance the quality of online course delivery. This study seeks to investigate the following research questions: RQ 1: What challenges do part-time lecturers encounter when utilizing LMS? RQ 2: In what ways can part-time lecturers effectively adapt to and utilize LMS?

Learning Management Systems are designed to address contemporary educational demands by providing both asynchronous and synchronous learning opportunities within an information-centric culture. Features such as enhanced communication (Llamas-Nistal et al., 2011), accessibility, flexibility, self-directed learning, interactivity (Abdous, 2013), skill enhancement, and increased content availability considerably improve the educational experiences and motivation of students. Recent research has thoroughly examined the potential of Learning Management Systems (LMS) to revolutionize instructional practices, particularly through case-based and gamified learning methodologies (Palahicky & Halcomb-Smith, 2020).

Moreover, scholars advocate for a comprehensive deployment strategy to optimize the educational benefits of LMS (Mohamed & Vengrasalam, 2022). The Technology Acceptance Model posits that factors such as system quality, perceived self-efficacy, and supportive conditions significantly influence the adoption of Learning Management Systems (LMS) by higher education lecturers (Fearnley & Amora, 2020). Specifically, both system quality and perceived self-efficacy have a notable impact on perceived usefulness, which subsequently influences attitudes toward technology and behavioral intentions, as well as perceptions of ease of use and system quality (Fearnley & Amora, 2020).

The onset of the COVID-19 pandemic necessitated a rapid shift to online instruction, as governments worldwide enacted lockdowns to curb the spread of the virus (Maharaj, 2023). This abrupt transition posed substantial challenges for universities, particularly as many educators were inadequately prepared for these pedagogical shifts (Guillén, Cuellar & Alfaro, 2020). As Mollo (2022:8) asserts, higher education institutions face challenges in integrating these technologies, as remote teaching and learning require proficiency in online, blended, e-learning, mobile platforms, Learning Management Systems, Open Educational Resources (OER), and Internet usage. Therefore, substantial support is imperative to enhance online teaching methodologies, which can be utilized beyond the pandemic in various forms of digital pedagogy.

2. Theoretical framework

This research adopts the Technology Acceptance Model (TAM) as its foundational theoretical framework, specifically focusing on its two critical components: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), as outlined by Davis (1989) and Davis et al. (1989), not Wahdain and Ahmad (2014). Originally introduced by Davis in 1985, the Technology Acceptance Model was designed to clarify and predict the behavioral intentions of new end-users when interacting with computer-based information systems, highlighting how these users come to accept and effectively utilize technology.

The versatility of TAM enables its application across a wide range of disciplines, underscoring its robustness as a theoretical tool. For instance, research by Mathieson (1991) demonstrated that implementing the Technology Acceptance Model is more straightforward than implementing the Theory of Planned Behavior, suggesting that TAM may offer more immediate insights in certain contexts.

Furthermore, a recent investigation by Al-Emran and Granić (2021) rigorously evaluated the continued relevance and validity of the Theory of Acceptance and Use of Technology (TAM). Their findings reaffirmed that the model remains a valid and widely applicable framework across numerous applications and fields, thereby reinforcing its significance in understanding technology adoption.

In the context of this study, the Technology Acceptance Model (TAM) is particularly relevant, as it will provide valuable insights into how part-time lecturers at a university of technology (UoT) perceive the ease of use (PEOU) and the utility (PU) of technology. Utilizing a qualitative research approach, this study aims to delve deeply into these perceptions, thus illuminating the factors that influence the adoption of technology in educational settings among this specific demographic.

3. Methodology

Qualitative data gathering is used in this interpretive study. Eight part-time lecturers were interviewed for the project. Purposive sampling ensured that participants had experience teaching with Learning Management Systems (LMSs). The small sample size enables in-depth interviews to yield rich data, particularly in terms of experience with using Learning Management Systems (LMS) for course material distribution, student feedback, and communication. Participants were willing to participate in a focus group interview to gather data. Interviewing involves the exchange of ideas among individuals regarding a shared topic, highlighting the importance of human connection in the development of knowledge (Sahoo, 2021). Because focus groups allow people to communicate, exchange experiences, and debate LMS themes, they were chosen. The researcher took notes of participants' responses for analysis. The popular qualitative data analysis approach, thematic analysis, was employed. The process comprised finding, evaluating, and reporting data themes. Consent to participate was considered before conducting the study. Alphanumeric codes were used to protect participants' confidentiality throughout data processing and reporting. Participants could leave the study at any time without penalty. Lastly, all data was securely saved and only the researcher will have access to it. After the study, participants were notified for verification.

4. Findings and discussion

These findings are organized according to the major themes identified during the analysis: the perceived benefits of LMS usage, the challenges faced by part-time lecturers, and suggestions for enhancing LMS adoption and effectiveness.

4.1. Challenges associated with the use of LMS by part-time lecturers

4.1.1. Perceived Ease of Use (PEOU) challenges. *P1: "No one gave us training. I felt completely lost at the beginning."*

P6: "Using the LMS takes a lot of time, and with multiple jobs, I don't have time to experiment with it."

P7: "The LMS is difficult to navigate, and there's no proper guide. You have to figure it out yourself."

Part-time lecturers face specific usability challenges. Participants reported a lack of confidence due to inadequate training and the perceived complexity of the Learning Management System (LMS).

4.1.2. Perceived Usefulness (PU) barriers. *P2: "I use WhatsApp and email more than the LMS. Students don't even log into it unless I insist."*

P4: "I don't see how the LMS improves my teaching. It just adds another platform to manage."

The LMS has poor Perceived Usefulness since many participants said it didn't help their teaching. When tools are incompatible with their methods or ineffective in improving student learning, educators are less likely to use them. Lecturers often migrate to email or chat apps when they view Learning Management System (LMS) systems as administrative burdens (Bervell & Umar, 2018).

4.1.3. Institutional and technological constraints. *P3: "There is no tech support when I need it- usually evenings or weekends."*

P8: "We sometimes use our own devices and data. The university does not provide data to part-time lecturers."

Part-time instructors face significant barriers to implementing Learning Management Systems (LMS). These barriers include delayed access, insufficient technical support, poor internet connectivity, and limited institutional resources. Part-time workers often find themselves marginalized in academia due to institutional neglect and digital isolation.

4.2. Mechanisms that can be put in place to support part-time lecturers with the adoption and effective use of LMS

4.2.1. Enhancing Perceived Ease of Use (PEOU). *P1: "Short video tutorials showing how to upload content or set quizzes would be very helpful."*

P7: "Hands-on sessions, not just manuals, would work better for most of us."

P3: "A basic training session at the start of the semester would make a big difference."

The findings suggest that accessible, user-centered training improves Perceived Ease of Use. Participants preferred scenario-based learning, which included brief video instructions, live demonstrations, and ongoing assistance. Simpler onboarding, tailored assistance, and clear, multimodal learning tools can boost digital trust in instructors of all technological abilities (Al-Azawei et al., 2017).

4.2.2. Increasing Perceived Usefulness (PU). *P4: "We need templates or modules that match our subject areas—it saves time and makes it relevant."*

P6: "Show how LMS can improve interaction, not just post notes. Like forums or online quizzes."

Participants stressed that the LMS must be educational to be beneficial. Creating discipline-specific templates or toolkits to modify the LMS for course content and pedagogy is recommended. In part-time settings, explicitly displaying these qualities with examples and success stories can boost LMS engagement and perceived usefulness.

4.2.3. Strengthening institutional support. *P8: "Give part-timers access to devices or data bundles like you do for full-time staff."*

P6: "Have a dedicated point of contact or coordinator for part-time lecturers' digital support."

P7: "Consider incentives for those who use LMS effectively—some recognition would help."

The data indicates that part-time teachers are often neglected by educational institutions. To ensure digital inclusion, it is essential to provide timely access to Learning Management Systems (LMS), dedicated support staff, and necessary instructional materials, including devices and internet connectivity. Acknowledging the efforts of part-time instructors through incentives or professional development opportunities may enhance their engagement with the Learning Management System (LMS) (De Brún & McCarthy, 2021).

5. Conclusion

Several barriers exist to the effective use of Learning Management Systems (LMS). Among these are a lack of extensive training and technical support, system-related issues, and time constraints faced by part-time instructors. Additionally, some lecturers prefer traditional teaching methods over utilizing the LMS. These obstacles significantly diminish the effectiveness, satisfaction, and adoption of LMS among part-time faculty. The study recommends that universities invest in targeted training programs, provide accessible technical assistance, and design a user-friendly LMS interface to fully harness the potential of their systems. Moreover, incentivizing the integration of LMS within performance assessments could enhance engagement. By improving these aspects, part-time lecturers can more effectively integrate Learning Management Systems (LMS) into their teaching practices, ultimately leading to greater teaching efficiency and enhanced student learning experiences. Furthermore, the study suggests exploring students' perspectives to assess how the use of LMS by part-time lecturers impacts their learning outcomes. Future research could also investigate the effects of LMS training programs on the adoption and satisfaction levels of part-time lecturers across various departments and institutions.

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