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The Effect of Readiness on Technology Application and Lecturer Performance in Private Higher Education

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ABSTRACT

The purpose of this study is to investigate the effects of readiness on technology use and how it affects lecturer performance in private higher education institutions. Due to technology and digitalization, the increasing integration of digital tools and platforms in higher education will explore how technology influences teaching effectiveness and overall performance has become essential. The key variables in this research include the lecturer's performance, technology application and technology readiness. A feasibility study was conducted, and several pieces of literature related to the effect of technology application on lecturer's performance were analyzed. A quantity approach will be adopted utilizing a survey method to collect primary data from lecturers in private universities. This study provides significant insights into the relationship between technology readiness, the application of technology, and lecturer performance in private higher education institutions. The study contributes to the growing body of literature on educational technology and provides a framework for further research on this critical topic in the context of higher education. Moreover, this study highlights the importance of continuous professional development and training for lecturers to keep up with technological advancements and enhance training programs for technological proficiency in future.

1. Introduction

Currently, we are living in a world where most information is stored digitally or in cyber form. Thus, the effectiveness of lecturers is greatly impacted using technology especially at private universities. The work environment, information technology support, motivation, training and leadership style are another important variables affecting the performance.

Using technology, such e-learning platforms like LMS, Google Meet, Webex and Zoom will, improves how educational content is delivered and encourages better communication between lecturer and students, which raises the standard of education. Furthermore, the utilization of technology by lecturers and their comfort level with it significantly influence their effectiveness, particularly in private universities.

Furthermore, the impact of technology on lecturer performance also extends to private higher education institutions' organizational performance, emphasizing the need for a comprehensive understanding of the effects of technology on teachers and students (Chan and Muthuveloo, 2019). In addition, factors including workload, work-related conflict, and work environment may have an impact on the occupational stress levels of private university instructors. This highlights the significance of creating supportive work environments to improve lecturer performance (Hernowo and Pamungkas, 2023).

Previous research has looked at the effective technology adoption among lecturers in private universities is hampered by issues including technostress, a lack of digital skills, and the lack of professional development programmes (Lamb and Ross, 2021). The relationship between technology application and lecturer performance is further complicated by elements including institutional support, resource accessibility, and the COVID-19 pandemic's effects on teaching methods (Bhebhe, 2023).

To maximise technology integration and enhance lecturer performance in private university settings, it is critical to understand the interaction between leadership styles, teacher motivation, and student engagement (Haziroh, Putra and Budiantoro, 2021). To achieve successful teaching and learning outcomes, it is critical to address technological preparedness and pedagogical tactics in light of the shift towards virtual assessment methods and the need for instructors to adjust to online teaching settings.

Therefore, as the result, The study highlights the importance of technology readiness in enhancing the use of technology in education, which improves lecturer performance and educational outcomes in private higher education institutions. The findings emphasise the need of universities investing in complete technology preparation programmes, providing continuing professional development for lecturers, and selecting user-friendly technical solutions.

2. Literature Review

The integration of technology in learning settings, with a focus on private university professors in particular, has been the subject of numerous study investigations. Muslimin, Mukminatien, and Ivone (2023) conducted a correlational study to investigate the relationship between English as a Foreign Language (EFL) lecturers and the impact of technostress, digital literacy competency, shows the positive relationship on teaching performance in private institutions.

According to Bavdaz (2022), the concept of technology application includes the application of contemporary information technology, which offers sophisticated communication, integration, computing capabilities, and the ability to prioritise processes above individual steps or tasks.

An extensive review was conducted on the application of classroom recordings in higher education, looking at the benefits and possible downsides that lecturers may have noticed. Notably, O'Callaghan, Neumann, and Jones (2015) investigated how lecture capture availability and application affected student attendance and performance. They found that academic accomplishment and lecture capture availability were negatively correlated, with attendance acting as a mediating factor.

On the other hand, Edwards and Clinton (2018) investigated how knowledge management integration into technology application affected university lecturer effectiveness, highlighting the importance of technology application and knowledge integration in improving lecturer performance.

Arifin and Sukmawidjaya (2020) conducted a different study that revealed an positive relationship between lecturer efficiency and technology application, as well as the significant influence of technological improvements on lecturer performance.

The impact that lecturers' perceptions of technology application have on their performance has been thoroughly examined in several research. According to Kalumendo (2022), for example, workers in small and medium-sized businesses (SMEs) in developing countries have a positive relationship with perceived usefulness, simplicity of use, and relative advantages when it comes to adopting new technology.

Other research by Callum, Jeffrey, and Kinshuk (2014) has thoroughly studied the relationship between digital abilities and technology application among professors in academia. They established a model to examine the impact of digital literacy, ICT anxiety, and ICT teaching self-efficacy on lecturers' acceptance of mobile learning, emphasising the critical importance of digital skills in technology adoption.

Furthermore, Stevani and Tarigan (2022) emphasised the importance of digital competence, which includes IT proficiency, digital pedagogical abilities, and professional digital skills, in supporting the integration of educational technology among English teachers.

Asari, Widyartono, and Shah (2020) delved into the impact of knowledge management integration and technology systems on lecturer performance, shedding light on the crucial role of work procedures and information technology in improving lecturer performance.

Technological readiness plays a pivotal role in the implementation of technology and its effect on lecturer performance. Earlier research has demonstrated that technological readiness significantly affects lecturers' engagement in online teaching (Martinho, Sobreiro, and Vardasca, 2021).

Studies concentrating on technology-supported, student-centred learning have highlighted that the attitudes and preparedness of lecturers towards such methodologies are crucial for their successful integration (Radyi and Usman, 2022). Additionally, the adoption of information technology has been found to have a positive impact on lecturers' performance (Asari, Widyartono, and Shah, 2020).

Based on the references provided, it is possible to conclude that technology application has an important positive relationship with lecturer performance. Integration of technology improves lecturer performance, instructional techniques, and student outcomes. Digital skills, knowledge management integration, and the perceived utility of technology all help to improve professor performance. Furthermore, lecturers' behavioural desire to utilise technology, digital literacy abilities, and favourable attitudes towards technology improve their performance in educational contexts. Overall, technology application is critical to boosting lecturer performance and instructional techniques in higher education.

Conceptual Framework

Figure 1 showed the conceptual framework of the main variables and the relationships of the study. The independent variable is lecturer's performance, which is measured by 2 dimensions: Technology application and technology readiness.



Figure 1 : Conceptual Framework

3. Methodology

In this research, the researchers will employ a questionnaire-based approach to measure the variables encompassing the readiness on technology application on the lecturer's performance. The population of this study consists of lecturer's who have are working in the private universities. The sample size of this study will be selected using the convenience sampling technique. Convenience sampling is chosen due to time and resource constraints, as well as the ease of access to the target population. The development of questionnaire items will draw from a diverse array of literature sources, as will be elaborated below.

Numerous research papers have investigated how technology use affects lecturer performance using a mix of questionnaire surveys and interviews. Arifin and Sukmawidjaya (2020), for instance, the studied to see how technology transformation affected lecturers' effectiveness. They used questionnaires to gather data for their study, and the results provided important new information about how technology use affects performance.

Questionnaire surveys and interviews can be used to conduct a thorough investigation of the impact of technology accessibility on lecturer performance, drawing on the literature that has been cited.

The research by Anthony (2021), which focuses on academic staff opinions of blended learning in higher education, is an excellent study in this field. This study examined instructors' opinions about blended learning efforts and how they affect academic activities through the use of surveys. Researchers can examine how much technology accessibility affects lecturer performance in educational settings by using similar approaches.

In a 2019 study titled "The Factors Influencing Perceived Ease of Use of E-Learning by Accounting Lecturer," Laily and Riadani (2019), investigated how lecturer performance was affected by "Perceived Ease of Use." Accounting professors who received questionnaires were the source of data for this study. The study provides insightful information about the variables influencing the perceived ease of use of e-learning platforms. Researchers can gain a deeper understanding of the application of the variable on perceived ease of use in the context of e-learning platforms for lecturer's by consulting this study. It also clarifies the elements that influence how simple it is to utilise technological tools and how it affects lecturer performance.

A study that offers relevant insights for this purpose is the research conducted by Stevani and Tarigan (2022), which examined the paradigm shift of English lecturers to support educational technology in online learning. This qualitative study involved gathering data from 23 English lecturers at higher education institutions in Indonesia. It highlighted how digital skills enhanced various factors such as knowledge acquisition, contextualized teaching, and stimulating ideas for feedback.

In determining the sample size and distribution of questionnaires, researchers can consider adapting the methodology utilized by Stevani and Tarigan (2022). The study's sample of 23 English lecturers could serve as a benchmark for selecting a similar number of participants from relevant educational institutions. The distribution of questionnaires was conducted electronically via email and online survey platforms, ensuring convenient access for participants. This approach facilitates efficient data collection and enables researchers to garner insights into the impact of digital skills on lecturer performance in the context of educational technology integration.

4. Conclusion

There are a few key variables to consider when examining how technology use affects lecturer's performance in private universities. The use of technology in the education sector has a big impact on how lecturers engage with their colleagues, students, deliver the material, and assess learning objectives. It creates opportunities for interactive teaching strategies, encourages teamwork and communication, and offers fresh perspectives on how best to assess the comprehension. Moreover, lecturer's comfort and familiarity with technology affect how ready they are to use it in the sector. For lecturer's to fully utilise technology resources, they require adequate training and support. However, the limitation of this study is a possibility that respondents who choose to answer the questionnaire may hold strong opinions or have particular experiences related to technology application and lecturer performance, potentially introducing bias and affecting the representativeness of the sample. The insights gained from this study are invaluable for policymakers and educational leaders aiming to foster a technology-friendly environment that supports the lecturer's in higher education. Future research should build on these findings to explore further the long-term effects of technology readiness and application on educational quality and to develop strategies for continuous improvement in technological proficiency among educators.

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