

Lecturers' Acceptance of Gamification in Training and Development: A Conceptual Study

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Abstract

With the rising prominence of e-training across various industries, the integration of gamification principles into organizational training has emerged as a dominant trend. This conceptual study aims to delve into the potential factors influencing the acceptance of gamification among lecturers within the training and development realm. Key variables under scrutiny include attitude, performance expectancy, social influence, perceived enjoyment, and perceived ease of use. The anticipated outcomes of this study are poised to furnish invaluable insights for organizations, particularly within the higher education sector, enabling them to refine their training and development strategies by incorporating gamification methodologies. The ramifications of this study extend beyond individual organizations, offering pertinent recommendations to the broader organizational landscape. By tailoring training programs to cater to the diverse needs and preferences of lecturers, the research contributes to the creation of engaging and effective training initiatives. This investigation aims to address a gap in understanding regarding the dynamics of gamification acceptance within the training and development domain, paving the way for future research endeavors.

Keywords: The Theory of Planned Behaviour Model, Technology Acceptance Model, Unified Theory of Acceptance and Use of Technology Model, Employee's Acceptance, Gamification, Attitude, Performance Expectancy, Social Influence, Perceived Enjoyment, Perceived Ease of Use

1. Introduction

1.1 Research Issues and Problems

Online training, or e-training, has gained significant popularity and is being increasingly implemented across various organizational sectors. According to reports, the worldwide corporate training industry was valued at \$332,931.1 million in 2019 and is projected to reach \$487,305.7 million by 2023 (Newswire, 2023). This growth can be attributed to the rising demand for workplace learning globally and the increasing popularity of microlearning. Furthermore, the industry is experiencing expansion due to the growing utilization of gamification in employee training (Newswire, 2023).

According to Deterding (2012), gamification, which refers to applying gaming techniques in non-gaming situations, has demonstrated its versatility and effectiveness in various industries. The concept of gamification was initially introduced in 2008, but it gained widespread popularity and began to be implemented in various industries in 2010 (Reiners et al., 2012). According to Wanick and Bui (2019), the rise of Industry 4.0 has increased the significance of gamification in organizations. This approach is becoming more popular in numerous business sectors because of its positive outcomes, such as enhancing worker motivation, boosting staff engagement, and providing a more enjoyable work environment (Latip et al., 2023).

Wunderlich et al. (2020) argue that gamification methods are indispensable for the Human Resource (HR) department to enhance the effectiveness of training and development programs, monitor employee performance, provide valuable feedback, establish reward systems, and streamline the hiring process. Training and development are pivotal for every organization to ensure that employees acquire the requisite knowledge and enhance their skills, enabling them to perform their tasks proficiently.

Meanwhile, in Malaysia, the adoption of e-training is not a new phenomenon. Companies in Malaysia have been embracing e-training to capitalize on the potential benefits associated with this emerging trend (Ramayah et al., 2012). According to Yun-Han (2022), more than half of the workforce in Malaysia consists of the younger generation (Gen Zs and millennials) compared to the older generation. Therefore, it is imperative to transition towards a training method that is more captivating and aligned with digital advancements. E-training offers captivating and customized experiences that can enhance their efficiency and contribute to the organization's overall success (Latip et al., 2023).

The onset of the COVID-19 pandemic has significantly impacted various aspects of people's daily routines, employment, and education. Consequently, higher educational institutions have been compelled to overhaul their teaching methods to adapt to the situation. Globally, educational institutions faced unprecedented challenges as traditional classroom lectures and physical interactions had to be discontinued, prompting a shift towards prioritizing digital technology for delivering daily courses (Eltahir et al., 2023). In response to these obstacles, gamification has gained popularity and is now widely utilized by most lecturers in their learning sessions to ensure that their students remain motivated and enjoy the learning

process. As this method continues to gain traction in learning sessions, it is only natural for lecturers to incorporate it into their activities to ensure proficiency with this technology. Research by Latip et al. (2020) indicates that social influence is one of the factors influencing students to accept the use of gamification in their studies. Therefore, when lecturers encourage them to employ gamification methods in their learning, students are more likely to embrace them.

In the context of Human Resources (HR) training, the integration of gamification holds significant promise. HR professionals play a vital role in optimizing employee engagement, performance, and organizational effectiveness. By incorporating gamification into HR training programs, organizations can create immersive learning experiences that not only educate but also motivate employees to actively participate and apply their newfound knowledge. For instance, HR training modules can be gamified through interactive quizzes, scenario-based simulations, and reward systems designed to incentivize learning achievements. This approach not only enhances knowledge retention but also encourages employees to engage proactively with the training material. Furthermore, gamification in HR training can simulate real-world workplace scenarios, allowing employees to develop practical skills and problem-solving abilities in a risk-free environment. Moreover, the social influence aspect identified by Latip et al. (2020) can be leveraged within HR training contexts. HR professionals can cultivate a culture of learning and collaboration by promoting peer-to-peer interactions and recognition within gamified training environments. This social component not only boosts employee engagement but also fosters a sense of camaraderie and teamwork within the organization.

In the specific context of using gamification as a training tool for lecturers, the integration of gamified elements holds immense potential to revolutionize professional development in higher education. Lecturers, as key stakeholders in the educational process, are tasked with not only imparting knowledge but also fostering engagement and critical thinking among students. By incorporating gamification into training programs for lecturers, educational institutions can offer dynamic and interactive learning experiences tailored to the unique needs of educators.

In conclusion, the incorporation of gamification in HR training offers a promising avenue to enhance learning outcomes, foster employee engagement, and drive organizational success. Previous research has predominantly focused on investigating the effectiveness of integrating game design into training (Latip et al., 2023) and the influence of gamification on employee engagement and performance (Hosseini et al., 2022). While many companies have adopted gamified e-training platforms to enhance employee motivation, engagement, and learning results (Silic & Lowry, 2019), there remains a significant research gap in understanding the factors that influence employees' acceptance and utilization of gamification for their training and development (Latip et al., 2023). Therefore, it is essential to delve deeper into the various aspects that potentially impact an employee's acceptance of gamification in a training and development-focused environment, particularly in higher education.

1.2 Critical Needs of the Study

As online training becomes increasingly prevalent across various industries, there is a growing trend of integrating game-like features into organizational training. However, there exists a significant gap in our understanding of what motivates employees to embrace gamification in their training and development. This study aims to address this crucial gap by examining potential factors that could influence employees to accept gamification in training and development.

It is important to emphasize that this study transcends academic exploration; it directly tackles the practical needs of organizations, particularly those in higher education. The objective is to provide actionable insights that can assist organizations in enhancing their staff training and development practices by uncovering the effectiveness of gamification. This, in turn, could lead to more engaging and impactful training sessions, ultimately resulting in a workforce that is not only more skilled but also highly motivated.

Therefore, this study holds significant importance as it seeks to illuminate unexplored aspects of gamification acceptance, offering valuable insights that can inform enhancements in training and development strategies for organizations adapting to the evolving landscape of online learning.

1.3 Critical Review of Gamification as a Training Tool for Lecturers

Examining the acceptance of gamification as a training tool for lecturers is crucial in the realm of professional development within higher education. This research endeavor is pivotal for several reasons. Firstly, it facilitates the enhancement of professional development initiatives by introducing an engaging and interactive approach to learning for lecturers. By embracing gamification, training sessions can be tailored to meet the specific needs and preferences of educators, ensuring they receive the support necessary to excel in their roles.

Furthermore, understanding lecturers' attitudes towards gamification in training allows educational institutions to address their training needs more effectively. By gauging acceptance levels, institutions can design training programs that are better aligned with lecturers' expectations, thus optimizing resource allocation and promoting sustainable professional development practices.

Additionally, incorporating gamified elements into training sessions has the potential to increase engagement and motivation among lecturers. By making the learning experience more enjoyable and dynamic, gamification fosters greater participation and commitment to the training process, ultimately leading to more effective professional development outcomes.

Moreover, embracing gamification as a training tool promotes a culture of lifelong learning among lecturers. By experiencing the benefits of gamified training firsthand, educators may be more inclined to adopt similar techniques in their own teaching practices, thereby promoting continuous improvement and innovation within higher education.

2. Literature Review

2.1 The Theory of Planned Behavior Model (TPB)

The Theory of Planned Behavior (TPB) extends the Theory of Reasoned Action (TRA) and is designed to forecast and describe human behavior within specific situations (Latip et al., 2021). Its purpose is to emphasize the motivating variables influencing individual actions (Ajzen, 1991). The TPB comprises three primary external factors: attitude, subjective norm, and perceived behavioral control. Attitude refers to the extent of positive or negative appraisal of behavior. Similarly, subjective norm (a predictor of social factors) encompasses the perceived social pressure to perform or ignore certain behaviors. The ultimate determinant is the perception of behavioral control, which encompasses all aspects of perceived behavioral performance, including past experiences and current barriers (Ajzen, 1991).

2.2 Unified Theory of Acceptance and Use of Technology Model (UTAUT)

The Unified Theory of Acceptance and Use of Technology Model was formulated and derived from eight preceding technology acceptance models, as proposed by Venkatesh et al. (2003). According to Tagoe (2012), this model has been widely used in many research studies to examine users' behavior in accepting technology.

The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed and derived from eight previous models of technology acceptance. The first model among these is the Theory of Reasoned Action (TRA), which was developed in 1980 and has undergone multiple revisions, eventually transforming into the current and more comprehensive version of UTAUT. After TRA, subsequent models include the Technology Acceptance Model (TAM), the Motivational Model (Davis et al., 1992), the Theory of Planned Behavior (TPB), the PC Utilization Model (MPCU) (Thompson et al., 1991), the Innovation Diffusion Theory (IDT), the Social Cognitive Theory (SCT) (Bandura, 1986), and finally, the Unified Theory of Acceptance and Use of Technology (UTAUT) by (Venkatesh et al., 2003). In fact, UTAUT is one of the models used to evaluate the likelihood of success of a new technology.

2.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), introduced in 1989, has increasingly become a focal point in research for its effectiveness in evaluating and predicting individuals' adoption and acceptance of information systems and technology (Latip et al., 2020). Derived from the Theory of Reasoned Action (TRA), TAM provides a structured framework for understanding how users perceive and interact with new technologies. Its widespread popularity stems from its simplicity and applicability across various contexts, making it a valuable tool for researchers and practitioners alike seeking to assess user behavior and technology acceptance.

2.4 Gamification

Gamification can be defined as “the application of game design features in non-gaming contexts” (Zimmerling et al., 2019). According to Latip et al. (2023), gamification strategically employs elements drawn from the world of games, such as game mechanics and cognitive frameworks, to actively immerse individuals in tasks, ignite their enthusiasm, encourage meaningful engagement, create a conducive environment for learning, and prompt

effective problem-solving approaches.

Gamification has emerged as a technology-based approach utilized across multiple fields due to the several advantages it provides to users. When implemented correctly and with appropriate mechanisms, gamification can have numerous beneficial effects on employees. Certain essential phases or features need to be met to utilize gamification successfully and achieve positive outcomes (Aparicio et al., 2012; Latip, 2020). Firstly, it is crucial to understand the target audience (for example, employees). Secondly, it is essential to determine the desired outcome or objective. Finally, it is imperative to employ appropriate gamification elements to incentivize the player to participate effectively in desired actions.

Pavlou (2020) offers excellent insights on how to effectively utilize gamification in the workplace, including six practical tactics for its application. These strategies involve: (i) explaining the objectives and procedures of the game, (ii) incorporating gamification into training, (iii) providing incentives, (iv) acknowledging the contributions of all individuals, v) monitoring the effectiveness of gamification in the workplace, and (vi) evaluating performance.

2.5 Attitude

Attitude is defined as an individual's assessment of the thought processes that influence their opinions on issues, people, and ideas, as measured on three-part self-report measures (Bonher & Dickel, 2011). According to Yzer (2017), attitude is a personal factor that strongly influences a person's purpose, based on specific views about prospective acts and involving subjective judgment.

Mustafa et al. (2022) conducted a study on instructors' intention to utilize gamified online learning. Their research revealed that attitude was the strongest predictor of instructors' intention to use gamified elements in online learning. Based on these findings, it can be inferred that lecturers' beliefs, emotions, and personal opinions about using games in their training will significantly impact their overall decision on whether to utilize this method.

Furthermore, Ursavaş et al. (2019) conducted a study in Turkey to examine the impact of subjective norms on the perception, attitudes, and behavioral intention of preservice and in-service teachers towards technology usage. The study revealed that attitudes towards computers were the strongest predictors of behavioral intention for both preservice and in-service teachers. Drawing from this past study, it can be predicted that in gamification situations, lecturers' attitudes towards gamified approaches may also play a significant role in determining their acceptance and subsequent use of gamification in training settings.

Thus, based on the above literature, the following hypothesis is proposed:

H1: Attitude significantly significantly affects the acceptance of gamification in training and development among lecturers.

2.6 Performance Expectancy

Performance expectancy refers to an individual's belief in the advantages and practicality

obtained from utilizing technology and systems (Latip et al., 2022; Venkatesh et al., 2003). In this study, performance expectancy pertains to the extent to which employees believe that integrating gamification into their training can enhance their performance. If employees perceive that incorporating gamification techniques into training can improve their job performance, they are more likely to engage in this approach. Conversely, if employees do not perceive any significant advantage to their job performance from this gamification technique, they may not be receptive to receiving training utilizing this style.

Previous research conducted by Chung et al. (2019) and Latip et al. (2022) has shown that students' acceptance of gamification in higher education is influenced by performance expectancy, which is considered an essential element compared to other variables.

Similarly, research by Mastor et al. (2023) indicated that performance expectancy was the primary predictor significantly influencing students' adoption of gamification in their learning compared to other examined variables. Students' acceptance of gamification as a learning technique was substantially influenced by their perception of how gamification can enhance their performance. These findings suggest that students were more likely to embrace gamification when they believed it would lead to improved learning outcomes, as opposed to other factors.

From this study, it is reasonable to argue and assume that if employees (lecturer, as in the context of the study) believe that integrating gamification into their training can enhance performance and engagement, they are more likely to adopt and embrace this innovative method.

Thus, based on the above literature, the following hypothesis is proposed:

H2: Performance expectancy significantly affects the acceptance of gamification in training and development among lecturers.

2.7 Social Influence

Social influence pertains to the process by which individuals are influenced by the actions and reactions of others (Latip et al., 2023). As stated by Alraja (2015), influence refers to the degree to which an individual recognizes the influential viewpoints of others, such as family or friends, that may impact their choice to embrace a new system.

Previous research by (Vanduhe et al., 2020) demonstrated that social influence has a favorable and significant impact on employees' willingness to utilize gamification in training. Additionally, Thomas (2023) discovered that social influence is one of the characteristics that strongly influences K-8 teacher' utilization of a Learning Management System (LMS). When teachers engage in collaborative activities with their peers, those regarded as exemplary models are more likely to influence their team's utilization of an LMS.

Furthermore, studies conducted by Chung et al. (2019) and Mastor et al. (2023) have revealed that social impact is a significant factor that affects students' inclination to utilize gamification in their learning sessions. If their friends or family encourage them to use this strategy in their learning, they are more likely to adopt it.

Based on the findings from prior research, social influence is likely to play a significant role in influencing lecturers' acceptance of gamification in training and development. The possibility of lecturers accepting and implementing gamified approaches is likely to increase if they are influenced by their professional peers, educational networks, or other important individuals.

Thus, based on the above literature, the following hypothesis is proposed:

H3: Social Influence significantly affects the acceptance of gamification in training and development among lecturers.

2.8 Perceived Enjoyment

Enjoyment refers to the innate gratification and delight obtained from using technology, as defined by Davis et al. (1992) Perceived enjoyment is a crucial internal motivator, gauging individuals' ability to derive pleasure and entertainment from information technology or an information system (Chao, 2019).

According to Alsaifi and Mendoza (2020), their study on predicting students' intention to use gamification mobile learning in Saudi Arabia found that perceived enjoyment is a significant factor influencing students to adopt gamification in their learning.

Furthermore, Klaiber and Kok (2022) revealed that perceived enjoyment is a key variable for the technical acceptance of gamification among Volvo CE employees. They perceive gamification as a means to make work more enjoyable. This is promising for designing well-crafted gamification tools, as new users are likely to find them more enjoyable, thereby increasing their inclination to use a gamification platform.

Relating this literature to the current study context, lecturers may be more inclined to incorporate gamification into their training sessions if they perceive it as enjoyable and engaging. This suggests that designing gamification elements that enhance enjoyment could be a strategic approach to encouraging lecturers to use gamification in training scenarios.

Thus, based on the above literature, the following hypothesis is proposed:

H4: Perceived enjoyment significantly affects the acceptance of gamification in training and development among lecturers.

2.9 Perceive Ease of Use

According to Davis (1989), perceived ease of use refers to how much a person perceives that using an information system will require little effort or mental load. Similarly, Venkatesh et al., (2003) stated that apparent ease of use represents the level of ease associated with using the system.

In a previous study conducted by Candra and Handoko (2023), which investigated the factors influencing lecturers' intention to adopt online gamification in higher education teaching-learning, perceived ease of use emerged as a significant factor impacting lecturers' intention to adopt online gamification. Lecturers tend to be more inclined to adopt

gamification strategies if they perceive them as easy to use and requiring minimal effort to implement.

However, contrastingly, Klaiber and Kok (2022) discovered that perceived ease of use had no significant relationship with the intention to utilize gamification among employees in the Volvo CE organization. According to this finding, gamification differs from traditional technology in that users place less emphasis on perceived ease of use when deciding whether to employ gamification. This suggests that factors other than ease of use may play a more prominent role in the acceptance and adoption of gamification strategies among employees in organizational settings. Further research is needed to explore these factors and their implications for the effective implementation of gamification in various contexts.

Thus, based on the above literature, the following hypothesis is proposed:

H5: Perceived ease of use significantly affects the acceptance of gamification in training and development among lecturers.

The summary of proposed hypotheses for future research is restated below.

Table 1. Summary of the proposed hypothesis

No	Hypothesis
H1	Attitude significantly affects the acceptance of gamification in training and development among lecturers.
H2	Performance expectancy significantly affects the acceptance of gamification in training and development among lecturers.
H3	Social Influence significantly affects the acceptance of gamification in training and development among lecturers.
H4	Perceived enjoyment significantly affects the acceptance of gamification in training and development among lecturers.
H5	Perceived ease of use significantly affects the acceptance of gamification in training and development among lecturers.

3. Proposed Methodology

For the forthcoming study, a robust quantitative approach will be adopted, employing a correlational research design to delve deeply into the relationships between variables without implying causality. A cross-sectional study has been chosen as the preferred method, as it allows for data collection at a single point in time, aligning closely with the research objectives.

The study will target lecturers within higher education institutions across Malaysia, serving both as the population and the sample, owing to the absence of an available sampling frame. Utilizing purposive sampling, participants will be selected based on their relevance to the research focus, ensuring a representative sample. The individual will be the primary unit of

analysis, enabling a granular examination of factors influencing gamification acceptance.

Data collection will center on a meticulously crafted self-administered questionnaire utilizing a 5-point Likert scale to gauge participants' perceptions. Statistical analyses will encompass both the Statistical Package for the Social Sciences (SPSS) and partial least squares structural equation modeling (PLS-SEM). This comprehensive approach will include reliability tests, identification of outliers, assessment of normality, examination of multicollinearity, and other assessments to fortify the robustness of findings.

Furthermore, critical analysis will be conducted using PLS-SEM, a powerful statistical technique that allows for the assessment of complex relationships between multiple variables. By employing PLS-SEM, the study aims to uncover nuanced insights into the underlying mechanisms driving gamification acceptance among lecturers in training and development settings.

The analysis plan encompasses a variety of assessments, such as evaluation of missing data, identification of outliers, assessment of normality (both univariate and multivariate), examination of multicollinearity, descriptive statistics, scrutiny for common method bias and non-response bias, evaluation of reliability of the construct, convergent and discriminant validity, determination of the coefficient of determination, examination of effect size (f^2), and assessment of predictive relevance.

Moreover, a pilot study will precede data collection to refine the questionnaire and validate its reliability and validity. This methodological rigor will strengthen the credibility and trustworthiness of the study's findings, thereby enriching its contribution to the existing body of knowledge on gamification acceptance in higher education contexts.

4. Conclusion

Based on findings from the literature review, numerous studies have explored the outcomes of implementing gamification in workplaces and the factors influencing its acceptance among higher education students. However, there remains a need for further research into the variables that influence employees' acceptance of gamification, particularly in the realm of training and development. Training and development activities are of paramount importance within organizations, serving as the bedrock of strategic priorities for employers and Human Resource Departments. Recognizing the pivotal role of training and development in instructing, refining, and enhancing employee skills, it is imperative to scrutinize the elements that lead employees to embrace gamification.

The contemporary technological landscape, characterized by rapid advancements and a burgeoning population of younger employees, underscores the importance of integrating gamification methods into training and development endeavors. This alignment with the preferences and technological predispositions of today's workforce suggests a promising avenue for bolstering engagement and improving learning outcomes in such programs.

Focusing on the context of lecturers in Malaysia, this study endeavors to offer valuable insights into the factors influencing employees' acceptance of gamification in training and

development initiatives. The findings of this research have the potential to empower organizations, particularly their human resource departments, with a profound understanding of the dynamics shaping employees' attitudes towards gamified training endeavors.

Armed with this newfound knowledge, organizations can design training programs that are not only more effective but also tailored to the specific needs and preferences of lecturers. Addressing the issues that impact employees' willingness to embrace gamification in training is crucial for achieving training objectives efficiently. By leveraging the findings of this study, organizations can enhance and fortify their employee development efforts by adopting an approach aimed at delivering engaging and efficient training and development activities customized to cater to the unique requirements of lecturers in Malaysia. This ensures the continual professional growth of lecturers while contributing to the overall success of an organization in an ever-evolving learning landscape.

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