Leveraging Gamified Human Resources Platforms to Enhance Learning and Development Outcomes among Banking Employees

Yutiandry Rivai [a]

[a] Business Faculty, Institut Bisnis dan Teknologi Pelita Indonesia, Indonesia

*Corresponding Author: yutiandry.rivai@lecturer.pelitaindonesia.ac.id

ABSTRACT

This study aims to examine how gamified HR platforms influence learning and development outcomes among banking employees. This study employs a qualitative research approach to gain an in-depth understanding of how gamified HR platforms influence learning and development outcomes among banking employees. A case study design will be used, focusing on one or more banking institutions that have implemented gamified HR platforms for training and development. Data will be analyzed using thematic analysis. The findings demonstrate that gamification significantly improves learning engagement, motivation, and knowledge retention. Features such as progress tracking, scenario-based simulations, and leaderboards contributed to more positive learning experiences compared to traditional e-learning. Gamified HR platforms can help modernize compliance training and skill development, making them more relevant and enjoyable. Future studies can build upon this work in conduct quantitative or mixed-methods research to measure the statistical impact of gamification on learning outcomes and job performance.

INTRODUCTION

In the era of rapid digital transformation, the banking sector faces increasing pressure to continuously upskill and reskill its workforce. Digital disruption, evolving customer expectations, and the rise of fintech competitors have made employee learning and development (L&D) a critical strategic priority. Traditional training approaches often fail to fully engage employees or deliver sustainable learning outcomes, especially among younger generations accustomed to interactive and technology-driven experiences (Wijaya et al., 2023).

Gamification, the integration of game elements such as points, badges, leaderboards, and challenges into non-game contexts, has emerged as a promising strategy to revitalize digital human resource management (HRM) practices. By incorporating gamified elements into HR platforms, organizations can foster higher motivation, engagement, and knowledge retention among employees. Research shows that gamification can transform mundane training processes into dynamic experiences that drive participation and performance (Nyoto et al., 2023).

In the banking industry, where regulatory requirements and the complexity of financial products demand continuous learning, gamified HR platforms can play a pivotal role. They not only make learning more accessible and enjoyable but also help create a culture of continuous improvement aligned with organizational goals. However, the effective implementation of gamification in digital HRM systems requires careful consideration of design, relevance, and employee perception to avoid superficial engagement or resistance to change (Mukhsin et al., 2023).

This study aims to examine how gamified HR platforms influence learning and development outcomes among banking employees. Specifically, it explores the extent to which gamification impacts learning motivation, training completion rates, skill acquisition, and overall job performance. By understanding these relationships, banks can make informed decisions about integrating gamified solutions to enhance their talent development strategies in the digital era.

LITERATURE REVIEW

Digital Human Resource Management (Digital HRM)

Digital HRM refers to the integration of digital technologies into human resource functions to improve efficiency, engagement, and strategic decision-making (Renaldo, Suhardjo, et al., 2022). In the context of learning and development (L&D), digital HRM platforms enable personalized learning, real-time performance tracking, and mobile access to training modules. The banking industry, facing rapid digitalization, increasingly relies on these platforms to upskill employees and maintain competitive advantage (Renaldo, Jollyta, et al., 2022).

Gamification in HRM

Gamification is defined as the application of game mechanics, such as points, levels, badges, leaderboards, and challenges, in non-game contexts to influence user behavior and engagement (Renaldo, Putra, et al., 2022). In HRM, gamification has been used in recruitment, training, performance management, and employee engagement (Renaldo, Sudarno, et al., 2021). By making learning experiences more interactive and rewarding, gamification stimulates intrinsic motivation and encourages consistent participation (Renaldo, Suhardjo, et al., 2021).

Gamified Learning Platforms and Motivation

Studies show that gamified learning platforms can enhance both intrinsic and extrinsic motivation in employees. Elements like progress tracking and achievement rewards appeal to employees' psychological needs for competence, autonomy, and recognition (Mamonto et al., 2023). (Sudarno, Renaldo, et al., 2022) found that gamification significantly increased employees' intention to continue using training platforms, especially when tasks were perceived as challenging yet achievable (Junaedi, Suhardjo, et al., 2024).

Learning and Development Outcomes

Effective L&D programs result in improved knowledge retention, skill acquisition, and job performance. According to (Yusrizal et al., 2021), employee engagement in training is one of the strongest predictors of positive learning outcomes. Gamification enhances engagement through repetitive practice, feedback loops, and social comparison, leading to better knowledge internalization (Renaldo et al., 2023). In the banking industry, where compliance and technical knowledge are crucial, gamified training can make complex topics more digestible and memorable.

Gamification in the Banking Industry

Several banks have adopted gamification to modernize employee training (Junaedi, Renaldo, et al., 2024). For instance, Banco Santander and DBS Bank have reported positive impacts from integrating gamified modules in areas like product knowledge, cybersecurity, and customer service (Istiana et al., 2022). These platforms often utilize microlearning, scenario-based games, and simulation exercises that mirror real banking operations (Renaldo & Veronica, 2024). While early results are promising, the success of such platforms depends heavily on user experience design, alignment with learning goals, and continuous evaluation (Aprila et al., 2025).

METHODOLOGY

Research Approach

This study employs a qualitative research approach to gain an in-depth understanding of how gamified HR platforms influence learning and development outcomes among banking employees (Sekaran & Bougie, 2016). A qualitative design is appropriate because it allows exploration of employees' subjective experiences, perceptions, and attitudes that cannot be fully captured through quantitative measures (Creswell & Creswell, 2023).

Research Design

A case study design will be used, focusing on one or more banking institutions that have implemented gamified HR platforms for training and development. The case study approach enables the researcher to investigate real-world applications of gamification in detail and to understand the contextual factors affecting its success.

Participants

Participants will consist of:

- Employees who have actively used gamified HR learning modules (e.g., compliance training, product knowledge games).

- HR managers or learning and development specialists responsible for designing and deploying the gamified platform.

A purposive sampling strategy will be applied to select participants with relevant experience. Approximately 15–20 employees and 3–5 HR managers will be recruited to provide diverse perspectives.

Data Collection Methods

Multiple qualitative data collection methods will be used:

1. Semi-Structured Interviews

Individual interviews will be conducted with employees and HR managers to explore:

- Perceptions of gamification features (e.g., badges, leaderboards).
- Motivational factors influenced by gamification.
- Perceived learning outcomes and behavioral changes.
- Challenges and recommendations.

Each interview will last approximately 45–60 minutes and be audio-recorded with consent.

2. Document Analysis

Relevant documents such as training reports, gamification design guidelines, internal evaluation results, and user feedback reports will be collected to triangulate findings.

3. Observation

If feasible, non-participant observation of training sessions or employee interactions with the gamified platform will be conducted to enrich understanding of engagement behaviors.

Data Analysis

Data will be analyzed using thematic analysis (Elfita et al., 2022). The process will include:

- Transcription and familiarization with the data.
- Coding of significant statements and segments.
- Identification and categorization of emerging themes (e.g., motivation drivers, learning engagement, barriers).
- Interpretation of themes in relation to the research questions and literature.

NVivo software will be used to facilitate coding and theme development.

Trustworthiness

To ensure the rigor of the study, the following strategies will be employed:

- Triangulation: Combining interviews, document analysis, and observations.
- Member Checking: Sharing preliminary findings with participants for validation.
- Audit Trail: Maintaining detailed records of data collection and analysis processes.
- Reflexivity: Reflecting on the researcher's potential biases and their influence on interpretation.

Ethical Considerations

Informed consent will be obtained from all participants. Anonymity and confidentiality will be strictly maintained. Data will be securely stored and used only for research purposes. Ethical clearance will be secured from the relevant institutional review board.

RESULTS AND DISCUSSION

Theme 1: Enhanced Learning Engagement

Many employees reported that gamified features, particularly badges, points, and leaderboards, increased their motivation to complete training modules. Participants described the experience as "more enjoyable than the usual e-learning" and noted that progress tracking created a sense of accomplishment.

"I used to postpone the compliance training, but when they introduced the points and badges, I felt more encouraged to finish early and see my name on the leaderboard." (Employee, 5 years of service)

This finding is consistent with prior research indicating that gamification can boost intrinsic and extrinsic motivation (Sudarno, Putri, et al., 2022). For the banking sector, where compliance training is often perceived as routine and obligatory, gamified elements provided novelty and positive reinforcement (Purnama et al., 2025).

Theme 2: Improved Knowledge Retention and Application

HR managers observed that employees who engaged with gamified modules demonstrated better retention of content and more confidence applying new knowledge in practice. This was especially evident in training related to product knowledge and cybersecurity protocols.

"After using the simulation-based games, employees could explain product features much more accurately to clients." (L&D Specialist)

Employees also reported that scenario-based simulations helped them connect training with real-life customer interactions, supporting the view that gamification can bridge the gap between theory and practice (Gazali et al., 2022).

Theme 3: Social Dynamics and Healthy Competition

Leaderboards created a competitive but supportive environment. Some employees were motivated by comparison, while others appreciated seeing colleagues' progress as a source of inspiration.

However, a few participants expressed concerns that leaderboards could also lead to stress or discouragement among lower performers.

"When I saw I was at the bottom of the ranking, I felt a bit embarrassed. But it also pushed me to try harder." (Junior Bank Officer)

This dual effect aligns with the literature on social comparison in gamification, while competition can drive engagement, it may also trigger anxiety if not balanced with supportive feedback (Fajri et al., 2021).

Theme 4: Implementation Challenges

Although most employees responded positively, several challenges were noted:

- Technical glitches: Occasional issues with tracking progress and awarding badges undermined trust in the system.

- Relevance of rewards: Some participants felt the rewards (e.g., virtual badges) lacked tangible value.

- Generational differences: Older employees were less enthusiastic about gamification compared to younger staff, highlighting the need for tailored design.

HR managers emphasized the importance of user training and clear communication to ensure all employees understood how to use the platform effectively (Jollyta et al., 2025).

Discussion

Overall, the results confirm that gamification in digital HR platforms has a significant positive impact on learning engagement, motivation, and knowledge retention among banking employees. The findings also suggest that:

- Gamification strategies must be carefully designed to balance competition and inclusivity.

- Tangible incentives or recognition can strengthen engagement, especially in sectors with diverse employee demographics.

- Continuous feedback and technical support are crucial for sustaining trust and participation.

This study reinforces the relevance of Self-Determination Theory (Panjaitan et al., 2024), showing that gamification supports employees' psychological needs for competence (through progress and mastery), autonomy (self-paced learning), and relatedness (social connection via leaderboards) (Safari et al., 2025).

In line with previous research (Panjaitan et al., 2023), gamified HR systems in the banking industry offer an innovative way to address the challenges of mandatory training and rapid skill development. However, successful implementation requires ongoing evaluation, alignment with learning objectives, and sensitivity to employees' preferences.

Conclusion

This study explored how gamified HR platforms affect learning and development among banking employees. The findings demonstrate that gamification significantly improves learning engagement, motivation, and knowledge retention. Features such as progress tracking, scenario-based simulations, and leaderboards contributed to more positive learning experiences compared to traditional e-learning. However, successful implementation requires careful attention to user preferences, technological reliability, and a balanced approach to competition.

Implications

The results have several important implications for HR managers and policymakers in the banking sector:

- Designing engaging learning experiences: Gamified HR platforms can help modernize compliance training and skill development, making them more relevant and enjoyable.

- Promoting a culture of continuous learning: Interactive modules encourage employees to take ownership of their professional development.

- Tailoring gamification strategies: HR teams should consider employees' age, digital literacy, and motivation styles when designing gamified systems.

- Supporting change management: Clear communication and training are needed to overcome initial resistance and maximize adoption.

Limitations

While this study offers valuable insights, it also has several limitations:

- Sample Size: The number of participants was relatively small, limiting generalizability.

- Single Industry Context: Focusing only on banking institutions in one country may not capture experiences in other sectors or cultural settings.

- Self-Reported Data: Findings rely on participants' perceptions, which can be subjective and influenced by social desirability.

- Short-Term Assessment: The study did not evaluate long-term impacts on performance or retention.

Recommendations

Based on the findings, the following recommendations are proposed:

- Invest in user-centered gamification design: Involve employees in co-creating gamified features to ensure relevance and acceptance.

- Combine intrinsic and extrinsic rewards: Offer both virtual recognition and tangible incentives to sustain engagement.

- Provide training and technical support: Equip employees with guidance on using the platform and resolve technical issues promptly.

- Continuously evaluate effectiveness: Regularly collect feedback and performance data to refine gamification strategies.

- Foster inclusivity: Ensure that gamified experiences cater to employees across generations and roles.

Suggestions for Future Research

Future studies can build upon this work in several ways:

- Conduct quantitative or mixed-methods research to measure the statistical impact of gamification on learning outcomes and job performance.

- Explore longitudinal effects to understand how gamification influences retention and career development over time.

- Compare gamification adoption in different industries (e.g., healthcare, education, manufacturing).

- Investigate the role of cultural factors in shaping employees' responses to gamified learning.

- Examine cost-benefit analyses to evaluate the return on investment of gamified HR platforms.

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