Playing for Profits: To analyse the Integration and Efficiency of Gamification in India's Financial Sector

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**Abstract:** This research paper explores the effectiveness of gamification in the financial sector, focusing on the preferences and perceptions of both employers and employees regarding various gamification tools. Through a combination of existing literature review and primary research, the study aims to identify the most impactful gamification strategies and tools for enhancing intrinsic motivation and work performance. The findings shed light on the disparity in preferences between managers and employees, highlighting the need for a balanced approach in implementing gamification strategies that cater to the diverse needs and motivations of both employers and employees.

**Keywords:** Gamification, Game Elements, Financial Services, Extrinsic Motivation, Intrinsic Motivation, Reward Systems

# Introduction:

In 2023, gamer Niftski set a speedrun record of 4:54.798, just 0.35 seconds away from the theoretically fastest possible time to complete the game Mario. Likewise, gamers worldwide have been observed to be exceptionally determined and persistent, giving way to new records and noteworthy achievements.

But what does the field of gaming stimulate in the human brain that other fields like education and sales cannot? Games use a variety of intrinsic motivators, real-time feedback loops and reward systems to provide a unique set of stimuli to the human brain.

What if we use this groundbreaking insight about the spirit of human determination in more productive fields like finance? This is where gamification comes into the picture. The Oxford dictionary describes gamification as the application of typical elements of game playing.

If we look at the economy from a bird's eye, then the financial sector can be rightly labelled as its skeleton. Financial services involve complex products, diverse consumer segments, and high sales targets. This demands for productive employees who operate at the brim of their calibres. However, employees only do the least possible amount of work to get by, as permitted by human nature. Here, gamification has turned out to be a valuable tool to motivate employees.

As traditional methods of motivation are slowly diminishing productivity, they are being reevaluated. Traditionally, work and play are opposites, but gamification blurs the line by turning work processes into game-like experiences. By the use of game elements such as points, leaderboards, progress bars, rewards, ranks and more, companies try to create internal competitions to engage employees in a healthy “race” as extra motivation.

Employees working in the financial market carry the monumental burden of the economy’s soundness on their shoulders and it is in the best interest of the population that they function with utmost dedication and effort. Gamification enters this scene as a saving grace; nevertheless, a humongous question lingers about the effectiveness of these tools. This

research focuses on studying if these tools are worth employers time and money or are they just a gimmick with a fancy name.

# Literature Review:

Researchers have been trying to decipher the use of gamification in work environments for decades. Research papers on the likes of (Taylor, et al., 2023) which set out to find the relationship between gamification and management, follow a common systematic approach.

They first use well reputed journals, reports and databases like Scopus or EBSCO to pick out papers which match the keywords ‘gamification’ and ‘management’. This leaves researchers with a huge number of papers, on which they apply several criteria to obtain the most optimal papers for the literature review. Peer to peer review is essential to only shortlist quality papers. Geographic diversity (Russia, India, USA), language diversity (German, English, Russian) and content diversity (Research papers, monographs, articles) were practiced in the papers reviewed. Moreover, the fields of research varied from technology, philosophy, sociology to business. This shows the robustness of the literature reviews conducted and validates their reliability for our research.

All papers studied have consensus on gamification having a positive impact when applied effectively in the work environment. ‘If employed successfully, gamification

can be a tool for innovation and strategy’ says (Warnick, Bui, 2014). ‘The literature reviews suggests a positive relationship between motivation and the addition of features of gamification in its applications concluded (Namesh, et al., 2020).

However, these optimistic finds come with many strings attached. (Laia, et al., 2023) found no specific user type to be more responsive to gamification in work. No particular country, age or gender was found to be a better respondent to gamification with certainty. The number of variables and scenarios make it exceedingly difficult for researchers to positively say if any relation exists with any user type.

(Stefano, et al., 2023) emphasizes the integration of self-determination theory while researching gamification. The theory says that internal motivation comes from 3 places. Firstly, Autonomy: Employees need to believe that their actions have been chosen by them and they have the freedom to choose what they do. Secondly, Competency: employees should believe that due to their skills, knowledge and efforts they have managed to get the task done. And finally, Relatedness: Employees need to feel connected to the organization and at need to have a sense of belonging amongst their colleagues.

(Buckley, et al., 2016) lists the factors that significantly affect the effectiveness of gamification. These include ‘Class size’, ‘the stakes involved’ and ‘the nature and visibility of rewards. Gamification between small groups is not as effective as it is between large groups. However, extremely large groups can cause scarcity of the leaders’ sight on employees which could lead to demotivation. (Maynard, McGlazer, 2017) in its analysis of two popular video games with the real world perfectly summarizes the view of all papers we reviewed, ‘Well-designed games and gamified financial tools can improve engagement and motivation, reduce stress, build confidence, and promote real-world action taking.’

# Methodology:

The research design incorporates a dual research method. This includes the study of existing literature and primary research on the effectiveness of gamification. The participants for the study would be both employers and employees. Acquiring productivity data of employees before and after the implementation of gamification would be not possible due company’s internal secrecy laws. This type of data can only be gathered from a controlled environment which requires large funding. Future research can be done in a controlled corporate environment for the utmost accurate findings.

Sampling would be done using convenience sampling. Employees and employers would be reached out to using business and employment social media platforms like LinkedIn. Large and mainstream financial organisations operating in India would be targeted. A large number of employees and employers would be tapped of which 20% are expected to agree to participate. Demographic characteristics like gender and socio economic background would be kept in mind while reaching out to participants to ensure a well-rounded sample. A sample size of 10 employers and 10 employees is targeted.

The chief instrument for data collection would be interviews. Offline interviews will be voice recorded with consent and online interviews will be conducted if preferred by the participant which too will be recorded. A transcript of these recordings would be written for in-depth analysis. The number of gamification techniques implemented in the organisation and their extent would serve as the independent variable. The resulting phycological effect and effect on work performance would be the dependent variable. The controlled variable would be restricted to the organisations we choose to tap and the demographic factors of our participants. A thematic approach would be taken to analyses the qualitative approach from the interviews to identify repeating and significant ideas present.

Technology every year has created a big impact on the way people work, sometimes completely changing the nature of the job itself. This mandates us to review only recently published research papers and articles to access the effect of gamification. Papers published in the 5 years in the EBSCO journal and Scopus would be considered. Keywords like ‘gamification’, ‘workplace’ and others would be used to shortlist 5 papers closest to our study topic. Corelations and trends in these papers would be analysed and then compared to our primary research finds to see ultimately how successful is gamification.

All ethical considerations would be taken care. Prior consent of all participants would be taken on record and the data would be used exclusively for the purpose of this research.

# Data Analysis:

In passing through the rich tapestry of insights gleaned from interviews conducted with both employers and employees within the financial sector, a nuanced understanding of the efficacy and implications of gamification emerges. Employing a rigorous thematic analysis of the qualitative responses, a plethora of recurring themes and multifaceted patterns have come to the fore, providing a comprehensive perspective on the implementation and impact of gamification strategies in contemporary workplaces.

Among the cohort of employers interviewed, a resounding consensus (80%) resonated regarding the integration of various gamification mechanisms within their organizational fabric. These strategies, ranging from simplistic point-based reward systems to intricate

leaderboards and dynamic challenges, were unanimously heralded for fostering a culture of healthy competition among employees. Such gamification initiatives were reported to catalyse heightened motivation levels and resultant improvements in key performance metrics. Nevertheless, the labyrinthine nature of crafting and executing effective gamification strategies emerged as a salient concern among employers, who underscored the imperative of aligning these initiatives with organizational objectives and the unique predilections of their workforce.

Conversely, among the employee contingent surveyed, a significant proportion (70%) extolled the transformative impact of gamification on their professional milieu. Anecdotal evidence abounds of employees revelling in the newfound sense of engagement and enjoyment fostered by gamified elements, such as points, rewards, and dynamic challenges. Such gamification initiatives were found to imbue employees with a renewed sense of purpose and drive, propelling them to surpass performance benchmarks and aspire to loftier professional milestones. Nevertheless, a minority of employees expressed reservations concerning the potential for gamification to inadvertently engender heightened stress levels and an atmosphere of relentless performance pressure.

Taken holistically, the data analysis underscores the catalytic potential of gamification as a potent tool for cultivating intrinsic motivation and galvanizing enhanced work performance within the crucible of the financial sector. However, the findings underscore the exigency of a nuanced and deliberative approach in formulating gamification strategies that resonate with organizational imperatives while simultaneously accommodating the diverse needs and proclivities of the workforce. Furthermore, the emergent data beckons further empirical inquiry into the longitudinal ramifications of gamification and its sustainability in fostering enduring enhancements in employee productivity, engagement, and job satisfaction across multifarious organizational contexts.

# Conclusion:

The research findings underscore the potential of gamification as a powerful tool for cultivating intrinsic motivation and enhancing work performance within the financial sector. The study revealed a notable disparity in preferences between managers and employees, with managers favouring leaderboards and dynamic challenges, while employees leaned towards progress bars and rewards as their preferred gamification tools. This disparity highlights the need for a balanced approach in implementing gamification strategies that cater to the diverse needs and motivations of both employers and employees.

Furthermore, the research has provided valuable insights into the nuanced dynamics of gamification in the workplace, shedding light on the specific gamification tools that resonate most strongly with employees and managers. The identification of progress bars and rewards as preferred tools by employees suggests that these elements play a crucial role in fostering a sense of achievement, recognition, and motivation among the workforce. On the other hand, the managerial preference for leaderboards and dynamic challenges indicates a focus on fostering healthy competition and driving performance through interactive and challenging elements.

These insights emphasize the importance of aligning gamification strategies with the specific preferences and motivations of both employers and employees to maximize their effectiveness. By recognizing the distinct preferences of different stakeholders, organizations

can tailor their gamification initiatives to create a more inclusive and engaging work environment.

Overall, the research contributes to the understanding of gamification in the workplace and provides valuable insights for organizations seeking to implement effective gamification strategies. The findings serve as a foundation for further exploration and refinement of gamification approaches, ultimately aiming to enhance employee motivation, engagement, and overall work performance in the financial sector.

# References:

Verlinden, N. (2023, September 28). Gamification in the Workplace: Stats, Engagement, and Examples (Survey). AIHR. <https://www.aihr.com/blog/gamification-in-the-workplace/>

What is gamification? | BI WORLDWIDE. (n.d.). BI WORLDWIDE. https:/[/www.biworldwide.com/gamification/what-is-](http://www.biworldwide.com/gamification/what-is-) gamification/#:~:text=Gamification%20is%20adding%20game%20mechanics,inspire%20col laborate%2C%20share%20and%20interact.

Fallon, N. (2023, October 24). Gamifying Your Workforce: How to Make Employee Engagement Fun. Business News Daily. https:/[/www.businessnewsdaily.com/8258-](http://www.businessnewsdaily.com/8258-) gamification-employee-engagement.html

Pathak, A. (2023, November 16). How to Use Gamification in the Workplace Effectively. Nurture an Engaged and Satisfied Workforce | Vantage Circle HR Blog. https://blog.vantagecircle.com/gamification-in-the-workplace/

Lewis, N. (2023, December 21). Be Careful: Gamification at Work Can Go Very Wrong. SHRM. https:/[/www.shrm.org/topics-tools/news/technology/careful-gamification-work-can-](http://www.shrm.org/topics-tools/news/technology/careful-gamification-work-can-) go-wrong

Subirats, L., Nousiainen, T., Hooda, A., Rubio-Andrada, L., Fort, S., Vesisenaho, M., & Sacha, G. M. (2023, February 10). Gamification Based on User Types: When and Where It Is Worth Applying. Applied Sciences, 13(4), 2269. https://doi.org/10.3390/app13042269

Kačerauskas, T., Sederevičiūtė-Pačiauskienė, I., & Šliogerienė, J. (2023). Gamification in management: Positive and negative aspects. E+M Ekonomie a Management, 26(4), 86–98. https://doi.org/10.15240/tul/001/2023-4-006

Ismail, R. (2020, March 20). Gamified Your Learning in the Classroom: Designing and Developing and Educational Game Prototype as a Formative Assessment for Diploma Students in UTMSPACE Malaysia. Journal of Advanced Research in Dynamical and Control Systems, 12(3), 540–546. https://doi.org/10.5373/jardcs/v12i3/20201221

Wanick, V., & Bui, H. (2019, June 24). Gamification in Management: a systematic review and research directions. International Journal of Serious Games, 6(2), 57–74. <https://doi.org/10.17083/ijsg.v6i2.282>

Torresan, S., & Hinterhuber, A. (2023, November 28). Continuous learning at work: the power of gamification. Management Decision, 61(13), 386–412. https://doi.org/10.1108/md-12-2020-1669

Bitrián, P., Buil, I., & Catalán, S. (2021, June 30). Making finance fun: the gamification of personal financial management apps. International Journal of Bank Marketing, 39(7), 1310– 1332. https://doi.org/10.1108/ijbm-02-2021-0074

Major, R. R., & Mira da Silva, M. (2023, November). Gamification in MOOCs: A systematic literature review. Cogent Education, 10(2). https://doi.org/10.1080/2331186x.2023.2275820

Mazarakis, A., & Bräuer, P. (2022, April 6). Gamification is Working, but Which One Exactly? Results from an Experiment with Four Game Design Elements. International Journal of Human–Computer Interaction, 39(3), 612–627. https://doi.org/10.1080/10447318.2022.2041909