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A STUDY ON GAMIFICATION IN EMPLOYEES ENGAGEMENT PROGRAM AT RANE BRAKE LINING LIMITED

Siddharth M.¹, Ms. Brindha P.²

II MBA Department of management studies, School of Management Studies, Vels Institute of Science Technology and

Advanced Studies (VISTAS), Pallavaram, Chennai.¹

Corresponding Author, Associate Professor, Department of Management Studies, School of Management Studies, Vels

Institute of Science Technology and Advanced Studies (VISTAS), Pallavaram, Chennai²

Abstract: This study investigates the impact of gamification on employee engagement at Rane Brake Lining Limited (RBL), a prominent manufacturer in the automotive friction materials sector. Gamification, defined as the integration of game design elements in non-game contexts, is increasingly adopted by organizations seeking to enhance motivation, productivity, and employee satisfaction. Using a descriptive research methodology, supported by statistical tools such as Chi-square tests and ANOVA, this study analyses how elements like leader boards, badges, challenges, and real-time feedback influence engagement levels among employees across different demographics.

The findings reveal that gamification significantly improves workplace engagement by making routine tasks more interactive and rewarding. Employees reported higher motivation and job satisfaction when tasks were gamified and feedback was immediate. Moreover, the study identifies that age plays a critical role in shaping responses to gamified activities, indicating the importance of designing age-sensitive engagement strategies. Younger employees showed a stronger preference for competitive elements like points and leader boards, while older employees valued meaningful progress tracking and collaborative challenges.

While the benefits of gamification are substantial, the study also highlights potential risks, such as diminishing intrinsic motivation if gamified systems focus excessively on external rewards. Therefore, organizations must carefully balance intrinsic and extrinsic motivators to sustain long-term engagement.

In conclusion, the research underscores that thoughtful implementation of gamification can transform traditional HR practices by creating a dynamic, engaging, and emotionally connected workplace culture. The insights from RBL demonstrate how manufacturing industries, often seen as traditional in their employee management approaches, can successfully adopt gamified strategies to enhance organizational performance and employee well-being. Future research can expand this understanding by exploring the long-term impacts of gamification across various industrial sectors.

Keywords: Gamification, Employee Engagement, Motivation, Workplace Innovation, Human Resource Management (HRM), Organizational Performance.

I. INTRODUCTION

In today's dynamic corporate environment, organizations are constantly seeking innovative strategies to enhance employee engagement, motivation, and performance. One such emerging approach is *gamification*, which involves the application of game-design elements—such as points, badges, leaderboards, and challenges—in non-game contexts like workplace training, performance management, and employee development programs. Gamification has gained popularity for its ability to make routine tasks more interactive and enjoyable, thereby increasing employee participation and commitment.

Employee engagement is a key driver of organizational success, influencing productivity, job satisfaction, retention, and overall workplace culture. Traditional engagement initiatives, while effective to some extent, often fail to sustain long-term interest and motivation. Gamification addresses this gap by introducing elements of fun, competition, and recognition, which appeal to intrinsic human motivations.



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When implemented thoughtfully, gamification can transform workplace experiences, foster a sense of achievement, and encourage continuous learning and collaboration among employees.

This study explores the concept of gamification as a strategic tool in employee engagement programs. It aims to examine how gamified approaches impact employee morale, involvement, and performance within an organizational setting. The research also investigates employee perceptions of gamified systems, the challenges associated with their implementation, and the factors that contribute to their success or failure. By analyzing both theoretical frameworks and practical applications, this study provides valuable insights into the role of gamification in enhancing workforce engagement and offers recommendations for organizations seeking to adopt such innovative methods in their human resource practices.

RESEARCH PROBLEM:

Despite the increasing adoption of gamification in human resource management, there is a significant lack of empirical research examining its effectiveness in the manufacturing sector, particularly in companies like Rane Brake Lining Limited. Most existing studies are concentrated in IT, education, and service industries, with limited evidence on its applicability in industrial settings. Furthermore, the long-term impact of gamification on employee motivation and job satisfaction remains underexplored, especially within the Indian context. This research aims to address these gaps by investigating the role and effectiveness of gamification in employee engagement in a manufacturing environment.

OBJECTIVES:

> To identify the effectiveness of gamification with employee engagement program at Rane brake lining limited.

 \succ To find out the relationship between gamification and various dimensions of employee engagement among workers.

- > To analyze the impact of gamification on employee motivation and job
- ➤ satisfaction.
- > To explore employee's perceptions and acceptance of gamification strategies

RESEARCH QUESTIONS:

1. How effective is gamification in enhancing employee engagement at Rane Brake Lining Limited?

2. What is the relationship between gamification and the various dimensions of employee engagement among workers?

3. How does gamification impact employee motivation and job satisfaction in the organization?

4. What are employees' perceptions and levels of acceptance toward gamification strategies implemented in their workplace?

SIGNIFICANCE OF THE STUDY:

This study is significant as it explores how gamification can enhance employee engagement, motivation, and job satisfaction at Rane Brake Lining Limited. By evaluating the impact of gamified elements such as leaderboards, rewards, and challenges, the research provides insights into improving participation and performance across various departments. It addresses gaps in traditional engagement methods by introducing interactive, real-time feedback mechanisms. The study also helps identify employee perceptions, motivators, and barriers to gamification, offering practical recommendations for HR. Ultimately, it contributes to building a more dynamic, collaborative, and retention-friendly workplace culture.

II. LITERATURE REVIEW

Indhravishnoo and Bhuvaneswari (2025), this study focused on key factors influencing employee engagement at Rane Brake Lining Limited. It highlighted the significance of organizational culture, leadership style, and effective communication. Transformational and participative leadership styles were found to enhance employee morale and motivation. A culture of trust and openness was shown to improve engagement, job satisfaction, and performance.

Budhiraja et al. (2024), the author conducted a systematic literature review on the role of gamification in HR management. He found gamification to be impactful in recruitment, onboarding, and performance evaluation processes. Game elements increased employee interest and made HR functions more interactive and measurable. The review emphasized gamification as a modern and effective tool for strategic HR development.



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Xi et al. (2023), Xi and colleagues examined the effects of gamification on employee well-being across organizations. Their systematic review highlighted improved motivation, emotional engagement, and workplace satisfaction. Gamified systems supported mental wellness by reducing stress and enhancing participation. The study reinforced the psychological benefits of game-based approaches in work environments.

III. RESEARCH METHODOLOGY

Research Design:

The study adopts a descriptive research design to analyze the impact of gamification on employee engagement at Rane Brake Lining Limited, Chennai. It aims to evaluate employees' perceptions, participation levels, and motivational factors influenced by gamified activities. Structured questionnaires and statistical tools are used to collect and analyze data, providing insights and suggestions for enhancing employee engagement through gamification.

Sampling Method:

Convenience sampling is used to select participants based on their availability and willingness to respond.

Sample Size:

The sample consists of 60 respondents from various departments and designations at Rane Brake Lining Limited, Chennai. The selection ensures a representative understanding of employee experiences across different organizational levels.

Data Collection Method:

Primary data was collected directly from employees using structured questionnaires designed to capture opinions, engagement levels, and the effectiveness of gamification strategies within the workplace.

Data Analysis Tools:

ANOVA and Chi-Square Tests conducted using SPSS Software.

Variables:

- Independent Variable: Gamification
- > Dependent Variable: Employee Engagement

Ethical Consideration:

Participation was voluntary, with informed consent obtained. Strict confidently and anonymity were maintained throughout the research process.

LIMITATIONS:

Sample Size: The study was limited to 60 respondents, which may not fully represent all departments or employee perspectives within Rane Brake Lining Limited.

Geographical Scope: The research was confined to the Chennai location, and findings may not reflect the impact of gamification in other branches or regions.

Organizational Scope: The study focuses on a single organization, which may limit the generalization of results to other manufacturing or industrial sectors.

Response Bias: Some participants may have responded with socially desirable answers rather than expressing their true opinions or experiences.

RESULTS:

H₀: There is no association between the age of the respondents and looking forward to gamified activities. H1: There is association between the age of the respondents and looking forward to gamified activities.



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Age of the respondent	I look forw	vard to gamified	Total	Chi- square value	P value			
	Strongly tr	ue Somewhat true	Neutral	Somewhat untrue	Strongly untrue			
21-30years	6 3.0 10.0%	6 8.0 10.0%	5 7.3 8.3%	2 1.3 3.3%	1 0.3 1.7%	20 20.2		
31-40 years	2 2.8 3.3%	11 7.6 18.3%	6 7.0 10.0%	0 1.3 0.0%	0 0.3 0.0%	19 19.0		
41-50 years	0 1.1 0.0%	15 65.2 5.0%	2 8.69 3.3%	1 4.34 3.3%	3 13.0 0.0%	7 7.0	27.80	0.033
51-60 years	1 0.8 1.7%	3 2.0 5.0%	1 1.8 1.7%	0 0.3 0.0%	0 0.1 0.0%	5 5.0		
Above 60 years	0 1.3 0.0%	1 3.6 1.7%	8 3.3 13.3%	0 0.6 0.0%	0 0.2 0.0%	9 9.0%	_	
Total	9 9.0	24 24.0	22 22.0	4.0	1	60 60.0		
	15.0%	40.0%	36.7%	6.7%	1.7%	100%		



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Chi-Square	Tests
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	em square rest		
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.796ª	16	.033
Likelihood Ratio	28.420	16	.028
Linear-by-Linear Association	2.227	1	.136
N of Valid Cases	60		

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is .08.

INTERPRETATION:

Since the calculated p-value (P = 0.033) is less than the tabulated significance level (0.05), we reject the null hypothesis. This indicates that there is a statistically significant relationship between Age and Interest in gamified activities. In other words, an individual's age has a meaningful impact on their level of interest in participating in gamified activities, suggesting that age is an important factor influencing engagement in such initiatives.

ONE WAY ANOVA

H₀: There is no significant difference among the age of the respondent with respect to Gamification with employees engagement program.

H1: There is significant difference among the age of the respondent with respect to Gamification with employees engagement program.

Particulars		21 - 30	31 - 40	41 - 50	51 - 60	Above 60	F value	P value
The engagement program includes competitive elements like leader boards.		1.750 0.9665	1.632 0.8951	2.571 1.2724	2.600 1.1402	2.000 0.000	2.190	0.082
Points and rewards are used to motivate employees.	Mean SD	2.350 0.8751	2.053 0.6213	1.857 0.6901	3.200 1.4832	1.222 0.6667	5.502	0.001



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The gamified challenges relate directly to my work tasks.	Mean SD	2.150 0.9333	1.474 0.9048	1.857 1.2150	2.000 0.7071	3.000 0.0000	4.842	0.002
I receive instant feedback through the engagement platform.	Mean SD	2.100 1.0208	2.263 0.5620	2.286 1.3801	2.200 1.0954	1.889 0.333	0.338	0.851
The system of badges and levels helps track my progress.	Mean SD	1.850 0.9881	2.053 0.9113	2.286 1.2536	2.600 1.5166	3.667 1.0000	5.140	0.001

INTERPRETATION

Since the p-value is greater than 0.05, the result is not statistically significant. Therefore, we fail to reject the null hypothesis. This indicates that the perception of leaderboard-based engagement elements does not differ significantly across age groups.

Since the p-value is less than 0.05, indicating a statistically significant difference among age groups. This shows that the motivational impact of using points and rewards differs across age demographics. Organizations should consider tailoring reward systems to align with age- specific preferences to enhance engagement and emotional intelligence effectively.

Since the significant p-value under 0.05 indicates that age influences how employees perceive gamified challenges related to their work tasks. This finding suggests the need for age-appropriate design of gamification elements, as different age groups may connect differently to task-based engagement strategies in the workplace.

Since The p-value indicates a statistically significant difference (p < 0.05), showing that age groups vary in their perception of badges and level-based progress tracking. Organizations should consider age-specific engagement designs for such systems to ensure they are motivating and relevant to employees at different stages in their careers.

Since the statement "The gamified challenges relate directly to my work tasks" also has a p-value of 0.002, the differences among age groups are statistically significant. Since certain age groups (like 31–40) rated this lower than others, it reflects a potential misalignment between gamified tasks and actual job responsibilities for some employees, especially mid-career professionals.



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IV. DISCUSSIONS

The study suggests that tailoring gamified activities to different age groups can maximize employee participation and engagement. Customizing challenges based on generational preferences helps maintain long-term involvement and creates a more inclusive work environment.

> Age-Specific Rewards Systems: Implementing personalized reward systems for different generations enhances emotional intelligence and motivation, improving participation.

➢ Work-Related Challenges: Aligning gamified activities with real job responsibilities increases relevance, boosting productivity and engagement.

> Instant Feedback: Offering real-time feedback reinforces positive behaviors and strengthens emotional bonds between employees and the organization.

Flexible Tracking Systems: Customizing badge and level tracking for different career stages fosters career growth motivation.

▶ Inclusive Challenges: Combining team-based and individual challenges ensures engagement for diverse working styles and personalities.

V. CONCLUSIONS

This study highlights the potential of gamification to enhance employee engagement at Rane Brake Lining Limited, Chennai, by integrating game elements like points, badges, and challenges. It emphasizes the need for tailored strategies as different age groups respond differently to gamified activities. Gamification promotes a vibrant, highperforming workplace culture while improving motivation, collaboration, and satisfaction. With thoughtful design and continuous feedback, it can boost employee retention, emotional intelligence, and productivity. Overall, the study points toward a future of dynamic, interactive employee engagement that supports long-term organizational success.

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