Impact Of Gamification on Employee Engagement - An Empirical Study With Special Reference To IT Industry In Bengaluru

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Abstract. Gamification is a growing trend in employee engagement that helps workers accomplish specific goals & objectives by utilizing a digital environment. The worker engages in a game that provides points, standing, & incentives as they advance the abilities, objectives, or goals the business is attempting to connect. As more people use social media, the ubiquity of consumers sticks with mobile apps. Despite the growing complexity of mobile technologies more than ever, gamers are connected & enjoying gaming. More than ever, thanks to the increasing sophistication of mobile technologies, gamers are connected & having fun. Many employees' lives naturally lend themselves to gamification. It's a fun, simple, & accessible method to increase their level of engagement & productivity. It's estimated that 55% of American workers would like to work for a company that embraces gamification. In our daily lives, gamification elements have firmly established themselves. The simplest illustration is when users accumulate (digital) loyalty points, which they can use to unlock rewards if a certain threshold is met. Although not completely new, gamification in the workplace—aside from maybe the learning environment—still has a way to go. It's an extensively employed marketing tactic to raise engagement and foster client loyalty. The present research paper is attempting to explain the impact of gamification on employee engagement. & aims to find out the impact of gamification practices on employee engagement & Primary data is collected through questionnaire & it has been analysed by using appropriate hypothesis tools like T-Test, ANOVA & regression analysis.

Keywords: Gamification, Employee Engagement and Productivity

1 Introduction

The acronym "gamification" pertains to a contemporary idea that applies elements of games to non-gaming activities, such as marketing, education, business, and job
productivity. Although the term "gamification" has been gaining popularity recently, the present concept of "business game" or "simulation" dates back almost a century. These days, the idea goes much beyond what was first proposed; it is widely used in business to improve customer journeys, increase critical performance metrics, and diversify everyday activities at work. A prevalent way to use gamification is through ratings, points, scoreboards, or awards. Despite the fact that gamification is still a relatively new concept, experts in the field have authored a large number of publications about its theory and applications. Nevertheless, the majority of studies concentrate on consumer-facing gamification strategies, with only a few studies addressing internal company components like HRM. The contributor has chosen to focus on employee motivation, the least explored application of gamification in HR, in accordance with the preliminary literature review. Moreover, there is no consensus on the topic of gamification. Some studies support the use of conventional motivational techniques, while others highlight the advantages of gamification. As a result, the current thesis work is on the application of gamification principles to HR tasks, specifically employee engagement. It takes into account, if a gaming framework is reasonable to implement in contemporary businesses.

**Fig.1: Implications**

![GAMIFICATION](https://www.digitalaptech.com)

Source: https://www.digitalaptech.com

### 1.1 Engagement through Gamification

With the help of conventional methods of employee engagement, it is now feasible to examine the various ways in which gamification can inspire people at work. Another strategy for increasing employee engagement at work is gamification. Employees get the chance to pick up new behaviors, skills, as it approaches to problem-solving. The game's accomplishment and incentive programs cause a series of behavioral changes. Most importantly, gamified events are typically designed to provide employees with positive feedback and boost their motivation. Furthermore, gamification is used in employee engagement to break down difficult tasks into manageable assignments, which is advantageous for both the business and the workforce. It's important to realize that gamification does not replace traditional staff

**Fig 2: Benefits of Gamification**
Through the assistance of conventional methods of employee engagement, it is now feasible to examine the various ways in which gamification can inspire people at work. Another strategy for increasing employee engagement at work is gamification. Employees get the chance to pick up new behaviors, skills, and methods when it comes to problem-solving. The game's achievements and reward systems cause a series of behavioral changes. Most importantly, gamified events are typically designed to provide employees with positive feedback and boost their motivation. Additionally, gamification is used in employee engagement to break down difficult tasks into manageable assignments, which is advantageous for both the business and the workforce. It's important to comprehend that gamification is not a replacement for conventional staff.

2 Review of Literature

DaigaÈrgle , Iveta Ludviga [10], The article considers the methodology utilized by the association, examinations results, points of interest and downsides of the association, and mainly figures proposals for the association so as to improve sway on representative commitment through gamification. The target of the paper is to draw learnings and advanced proposals for the associations in Latvia that are worried about improving their worker commitment and show how gamification can be useful in their undertaking.

Indranil Bose & RamjeeMaheshwary [12], The study's findings unequivocally show that job satisfaction and employee engagement are positively correlated. Extrinsic rewards, acknowledgement, the workplace culture, and empowerment have the greatest effects on job happiness; but, intrinsic rewards also play an essential part in job satisfaction. There is a substantial analytical relationship in the model between the independent variables and work satisfaction.

DeotimaSaha, prof. Deepika pandita [11], Proposes making a game is not necessary for gamification. It implies enhancing the enjoyment and engagement of HR efforts for workers without compromising their legitimacy. Employees that receive positive feedback and are pushed forward in their roles and KRAs are more motivated to learn and become more interested in their work thanks to gamification. Gamification has the potential to significantly increase employee motivation to learn and read more. The key performance indicator for gamification success is engagement. By adding gaming elements to an online course for learning and growth, we want to enhance students' performance by combining extrinsic and intrinsic motivation, which are both stronger and longer-lasting.

Cook & Whitney [5], Discusses the significance of employee engagement and gamification in the retail industry. Gamification, which is defined as providing employees with information that fosters peer competition and rewards high performers publicly, is being hailed as the next big thing in social media. It lists benefits of gamification that make it irresistible, like enabling workers to actively assess their performance, advancing knowledge, and raising overall achievement. Meister [13], argues that gamification can be applied to any process in a real organization, from hiring to training and development, and that it consists of 75% psychology and 25% technology. Gamification boosts employee engagement from a psychological standpoint by fostering a sense of rivalry, goal-setting, and internal motivation.
3 Statement of Problem

Amongst the workforce in IT and ITES sector lack of interest in monotonous job, can be a reason for decreased employee engagement. The company’s emphases on the work rather than the employees despite knowing that they are the asset to them. In this era of digital transformation, employers need to engage employees in such a way that they just don’t sign up for the job - they sign up for the entire ride. To reach organizational goals, these challenges need to be considered and solutions to be applied. The present research is conducted to know, if gamification can be used as a driver for enhancing the employee engagement in the workplace.

3.1 Objective of the Study

a) To measure the level of Employee Engagement.
b) To study the impact of Gamification on employee’s engagement.
c) To offer constructive suggestions to enhance the role of gamification in employee engagement.

3.2 Research Methodology

The study is descriptive in nature and convenience sampling technique was used to collect the primary data. Researcher has distributed 150 questionnaires, among which 107 responses were in useable form. Sampling unit was the employees of 10, IT and ITES companies, working in Bengaluru City. Data has been collected by adopting both the primary and secondary data. Primary data is considered with analyzing the opinions of the respondents collected with the help of structured questionnaire. In order to get a clear picture of impact of gamification on employee engagement, the secondary data has been collected by referring to various websites, journals and research papers, thesis related to Employee engagement through gamification. Data is analyzed by using various hypothesis testing techniques like ANOVA, T-test and impact of gamification on employee engagement is analyzed using regression.

4 Analysis and Interpretation

a) \[ H_0: \text{Gamification does not have significant impact on employee engagement.} \]

\[ H_1: \text{Gamification have significant impact on employee engagement.} \]

Table: 1 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Predictors: (Constant), Avg. of gamification aspects  
b. Dependent Variable: Average of Employee Engagement

**Table: 2 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>10.564</td>
<td>10.564</td>
<td>16.472</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>105</td>
<td>.641</td>
<td>.641</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>106</td>
<td>77.905</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Average of Employee Engagement  
b. Predictors: (Constant), Avg. of Gamification aspects

**Table: 3 Coefficients**

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Co-efficient Beta</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model B</td>
<td>Std. Error</td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.281</td>
<td>.248</td>
<td>5.169</td>
<td>.000</td>
</tr>
<tr>
<td>Avg. of gamification aspects</td>
<td>.414</td>
<td>.102</td>
<td>.368</td>
<td>4.059</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Average of Employee Engagement
Interpretation: Regression analysis was also done in order to find out the impact of gamification on employee and their work engagement. Knowledge about gamification factors like tool which can be used by organisation to motivate employees so to enhance their engagement. The value of multiple R is 0.127 and the value of r square is .136 in the equation. It states that of 13.6% of the employees knows about gamification aspect. An employee tends to leave the organisation because of less gamification aspects as well as their working style is having less contribution of gamification aspect, and fun at work is also low so it will lead to less engagement of employees. Hence the significant value is 0.00 which is less than 0.05(p>0.05) which states that there is awareness Gamification have significant impact on employee engagement.

b) H02: There is no difference in awareness Level of male /female towards Gamification.

H21 There is a difference in awareness Level of male /female towards gamification.

Table: 4 Group Statistics

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std.Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of EE</td>
<td>Male</td>
<td>62</td>
<td>2.4355</td>
<td>.81424</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>45</td>
<td>2.1289</td>
<td>.65249</td>
</tr>
</tbody>
</table>

Table: 5 Independent Samples Test

<table>
<thead>
<tr>
<th>Gamification Knowledge</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2 tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>4.0</td>
<td>.047</td>
<td>1.653</td>
<td>105</td>
<td>.01</td>
<td>.354</td>
<td>.214</td>
<td>-.07085</td>
<td>.7805</td>
<td>.7805</td>
</tr>
<tr>
<td>Game Principal</td>
<td>Equal variances</td>
<td>1.692</td>
<td>101.868</td>
<td>.094</td>
<td>.354</td>
<td>.209</td>
<td>.06102</td>
<td>.77069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.28</td>
<td>.085</td>
<td>1.087</td>
<td>.2</td>
<td>.213</td>
<td>.196</td>
<td>.56</td>
<td>.17613</td>
<td>.60337</td>
<td></td>
</tr>
<tr>
<td>Equal variances Not assumed</td>
<td></td>
<td>1.124</td>
<td>103.712</td>
<td>.2</td>
<td>.213</td>
<td>.190</td>
<td>.08</td>
<td>.16333</td>
<td>.59057</td>
<td></td>
</tr>
<tr>
<td>Game Aspect</td>
<td>Equal variances</td>
<td>2.822</td>
<td>.096</td>
<td>.550</td>
<td>.583</td>
<td>.114</td>
<td>.34</td>
<td>.207</td>
<td>.75</td>
<td>.29759</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td>.570</td>
<td>103.983</td>
<td>.5</td>
<td>.114</td>
<td>.200</td>
<td>.51</td>
<td>.28329</td>
<td>.51197</td>
<td></td>
</tr>
<tr>
<td>Equal variances Not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Game Based Work</td>
<td>Equal variances</td>
<td>3.189</td>
<td>.077</td>
<td>1.799</td>
<td>.075</td>
<td>.398</td>
<td>.92</td>
<td>.221</td>
<td>.76</td>
<td>.04078</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td>1.832</td>
<td>100.471</td>
<td>.0</td>
<td>.398</td>
<td>.217</td>
<td>.80</td>
<td>.03317</td>
<td>.83102</td>
<td></td>
</tr>
<tr>
<td>Equal variances Not assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gamification Contribution</td>
<td>Equal variances</td>
<td>2.305</td>
<td>.132</td>
<td>.534</td>
<td>.595</td>
<td>.091</td>
<td>.04</td>
<td>.170</td>
<td>.57</td>
<td>.24716</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
<td>.551</td>
<td>103.451</td>
<td>.5</td>
<td>.091</td>
<td>.165</td>
<td>.22</td>
<td>.23661</td>
<td>.41869</td>
<td></td>
</tr>
</tbody>
</table>
**Interpretation:** - The significant values are greater than 0.05. i.e. Game Principal (.085), Game Aspect (.096), Game Based Work (.077), Gamification Contribution (.132), Use of gamification periodically (.799), New employees or business automation (.081), Techniques adopted (.759) and it is less as in for gamification knowledge (.047). It clearly shows picture of the employees are using the gamification aspects but there is no awareness level of male/female towards gamification. From above table significance 2 tail values are greater than 0.05 (p>0.05). Hence, we accept the null hypothesis and reject the alternative hypothesis. Hence there is no significance difference in opinion among male and female respondents towards factor influencing their engagement through gamification.

<table>
<thead>
<tr>
<th>Use of Gamification Periodically</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.06 5</td>
<td>.7 99</td>
<td>- .109</td>
<td>105 .9 13</td>
</tr>
<tr>
<td></td>
<td>3.1 08</td>
<td>.0 81</td>
<td>2.332 105 .0 22</td>
<td>.495 70 .212 53 .074 29 .9171 1</td>
</tr>
<tr>
<td>New employee or Business Automation</td>
<td>Equal variances assumed</td>
<td>Equal variances not assumed</td>
<td>Techniques adopted Equal variances assumed</td>
<td>Equal variances not assumed</td>
</tr>
<tr>
<td></td>
<td>.09 5</td>
<td>.7 59</td>
<td>1.352 93 .1 80 .538 61 .398 31 .25235 56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.351 8</td>
<td>73.81 1 .351 8</td>
<td>.538 61 .398 77 .25600 21</td>
<td></td>
</tr>
</tbody>
</table>

### Findings

i. The finding illustrates that out of 107 respondents 57.94% respondent are male and 42.06% respondent are female.

ii. The finding reveals that out of 107 respondents 28.97% employees are from
Marketing Department, 24.30% employees are from human resource department, 23.36% are others, 14.02% are from Finance Department and 9.35% are from Sales Department and the majority of employees who knows about gamification aspect are from the Marketing Department.

iii. The finding shows that out of 107 respondents 44.86% of employees are strongly agree that performance goals are important, 28.97% of employees agree that performance goals are important, 12.15% of employees are neutral giving their responses, 9.35% employees disagree with the performance goals, and 4.67% employees are strongly disagree on the concept of performance goals.

iv. Out of 107 respondents 20.56% of employees strongly agree with external reward for employee engagement, 32.71% employees agree that external rewards for employee engagement, 23.36% of employees have a neutral aspect, 14.02% disagree and 9.35% employees strongly disagree with external reward factor for employee engagement.

v. The finding shows that out of 107 respondents 27.1% of employees strongly agrees that they will feel dissatisfied if they will not work effectively, 37.4% employees agree that they will feel dissatisfied if they will not work effectively, 16.8% of employees are having neutral response in this scenario, 14.0% disagree with the work dissatisfaction and 4.7% of employees are strongly disagree with this statement.

vi. The finding shows that out of 107 respondents’ maximum number of respondents are satisfied with the job role as there is gamified aspects.

6 Suggestions

i. Acknowledgment, compensation, and a spirit of competition are all great motivators that complement gamification approaches in the workplace to increase employee engagement. It depends on every one of these drivers to keep workers engaged and concentrated. Gamification is the mingling of technology and productivity in which non-gaming contexts employ game mechanics. Employee engagement is such a major problem that managers and upper management will do everything it takes to improve employee performance. Businesses will suffer if they do nothing about disgruntled employees. Gamification might be the key for a lot of teams. Employees should be motivated towards work involving game element and fun activities that would engage them.

ii. Pay structure should be redefined in the game points, so that employees remain monetarily satisfied.

iii. Maximum employees work on game element but does not have an idea about it so proper training or introduction about it must be provided to the employees.
7 Conclusion

Successful results for an organization are produced by its employees who are engaged. A high degree of work engagement have been linked to improved organizational commitment, higher job satisfaction, fewer absenteeism, and higher turnover rates, according to earlier research on the topic. Positively, proactive, self-driven, better achievers, and in excellent health are characteristics of engaged workers in the company. Employee engagement should be measured by organizations in order to provide a clear picture of the amount of effort and commitment that staff members are making to their jobs. Introducing efficient methods and improved operational procedures will undoubtedly result in a rise in the energy, enthusiasm, and commitment that individuals devote to their work. They would provide their zeal for the work they implement and their innovation. It is undeniably advantageous for the company and the individual (employee) to comprehend work engagement. An employee's connection, commitment, and most importantly engagement with his organization and work will undoubtedly increase if the two were in balance.

8 Scope for future research

The growing area of gamification in the area of employee engagement promises to be a fertile ground for future academic research. Today’s workplaces are heavily reliant on digital environments and social media, as well as mobile technology, and the intersection between these trends and gamification is an exciting area to explore. The theoretical basis that people are naturally drawn to games and friendly competition and rewards is in line with the widespread use of mobile applications and the increasing complexity of mobile technologies. Although gamification has been used in marketing to foster customer loyalty, the full scope of gamification in workplace dynamics beyond badges and rewards remains largely unexplored. This highlights the need to explore how gamification practices impact employee engagement, especially in areas outside of the traditional realms (e.g., learning spaces). Investigating the impact of different game elements on employee engagement and productivity, as well as overall workplace satisfaction, will provide valuable insights to academia and industry alike, and pave the way for better gamification strategies to break through existing boundaries and shape the future of organizational dynamics.

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