

# **Application of Gamification in Human Resource Management– an Empirical Research to Increase Employees’ Motivation and Productivity**

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## **ABSTRACT**

During the last couple of years, the term Gamification has gain a lot of attention from both the academic researchers and business practitioners alike. Gamification is defined as the use of game design elements in non-game context. This research aims to explore the application of Gamification in improving employee’s productivity and motivation level. First a detailed literature review has been done to understand what Gamification is. Then an empirical research has been carried out to in order to examine how Gamification can be used to increase employees’ engagement and motivation. Later the paper discusses how to use Gamification tools and techniques to build high performance human resource.

## **General Terms**

Game Theory

## **Keywords**

Game design, Human resource management, Gamification, game theory

## **1. INTRODUCTION**

With the advent of 21st century along with so many cultural, political and technological shifts there is also a major shift in the human psyche and way of thinking that drives their behavior and responsiveness to certain conditions that are enforced on them by external forces or that are generated and driven by their internal stimuli. This imposes a major challenge for the employers in creating an efficient employee engaging environment within their organization. This paper aims at understanding the use of Gamification technique by the employers to address the above mentioned problem by controlling the employees’ behavior and attitude towards their jobs so that they can be more productive and passionate in achieving their defined targets and goals. This will not only contribute in organizational success but also grooms the employees through internal motivation that enables them not only to enhance and polish their individual skills, but also empowers them to be an efficient and effective team player. In this paper we analyze how game design elements and game mechanism can be used to motivate and boost employees’ performance in both individual and collective manner.

The first section explains the concept of Gamification followed by the assessment on the need of keeping employees motivated. Later we will be empirically matching the game design elements with the employees’ engagement perspective. The last part will conclude this research paper.

## **2. GAMIFICATION**

According to [1], Gamification is the "use of game design elements in non-game contexts". Gamification research is still in its early stage, and many dimensions of implementation of this concept are yet to be explored. Yet a number of researchers have produced research articles in the area of Gamification [2]–[5]. Gamification includes a number of game design elements that have been applied by researchers and practitioners have proposed and applied these techniques in education, workplace and a number of other scenarios where there is a need to have enhanced engagement of the stakeholders involved. Gamified workplaces are not workplaces where employees play videogames. The long term goal of a Gamified workplace is to increase wellbeing at the organizational level (i.e., productivity) and personal level (i.e., work satisfaction) [6].

The idea is that Gamification provides an alternate lens using games to design the framework of motivation, as the concept was well explained in “Gamification: Designing for Motivation”, “Games are not a replacement for thoughtful experience and interaction design; they are an alternate lens for framing that process” [7].

## **3. EMPLOYEES’ MOTIVATION**

A number of businesses have gained exponential growth as well as suffered a huge amount of losses due to the motivation level of their employees. Good morale leads to ownership of tasks, and getting jobs done in an effective manner and within deadline; whereas low morale leads to employee disconnect with the company, and lack of ownership of the task, and ultimately in poor performance of that individual, affecting the overall performance of the organization.

According to the survey by the Gallup Organization estimates that there are around 22 million actively disengaged employees in the US, resulting in a loss of USD 350 Billion to the US economy in terms of low employee productivity, absenteeism, illness and other problems caused due to unhappy employees at the workplace [8].

Traditional Human Resource practices of managing people through ‘carrot and stick’ type of mechanisms are becoming history. With the advent of 21st century, there is a great change in human psychology. Employers are looking for sustainable mechanisms to engage their employees to get the best out of them. The use of Game mechanism and game design elements in a nongaming business practices helps the employers in creating a sustainable mechanism of engaging employees, and hence creating a mechanism for sustainable

business results. The game design elements can be used to create a culture of learning and growth of the employees, where they can not only groom themselves but also develop themselves as more vibrant team players. One might choose to deploy some elements of Gamification which might apply in a particular scenario, and forego others. Gamification provides positive effects; however, the effects are greatly dependent on the context in which the Gamification is being implemented, as well as on the users using it [9]. Gamification is an innovative manner to engage and motivate the employees to work in teams in achieving corporate goals and objectives. In order to do this, they are incorporating Gamification behavior platform for structuring such strategically sound teams. This is done to drive 'user engagement', i.e. to motivate users to engage with an application or service, usually by making it more 'fun' to use [10].

#### **4. GAMIFICATION FOR EMPLOYEES' MOTIVATION**

Applying game design elements to develop mechanism for employee motivation can have sustained and positive results in terms of employee motivation. We notice how thrilled a child is to get back to his play station, or computer game, willing to accomplish a particular level, so that he can share it with his friends on social media, and also earn more points; the child is so engaged into the game, that sometime he or she forgets that they are hungry, and never wants to end playing. All of this engagement is created through some of the game design elements. It is believed that the same elements if applied to a workplace would create a similar type of engagement and motivation in employees.

The key elements for Gamification as given in the literature are: Goals, competition and cooperation, time, reward structure, feedback, levels, storytelling, aesthetics, replay or do over [8]. In the following part of this section we will discuss how each of these elements can be used to engage employees:

##### **4.1 Goals**

In every game there is a clear goal, an objective, of what needs to be achieved, this motivate its players to play the game. Just like clear objective in the games, people at workplace needs clear goals of where the organization is heading and what is expected from them. People want to see how their role fits into the bigger picture of the business objective, which engages and motivates people to work.

##### **4.2 Competitions**

Just like in a racing game the two players race with each other, focused on optimizing their own performance to beat the other player. Just like in games where competition triggers interest of players, healthy competition at workplace triggers employees engagement and improves their performance. A competition between sales managers of different but similar territories improves performance and engagement of sales managers. Organizations should incorporate assignment of leader boards throughout their organization so that employees will know their professional standings relative to their peers.

##### **4.3 Cooperation**

Many games require players to achieve a particular goal together. This creates a synergy between players and creates an engagement. Just like that creating team and sub teams within the company also creates an engaging culture in the organization. E.g. creating a special team to solve a specific problem, and the cooperation between people of that team can

create an engaging environment for the employees and organizations can devise a group rewarding policy for employees that achieve goals in teams.

##### **4.4 Time**

Most of the games are time bounded, this creates a sense of urgency on the mind of the player, and the consequence of failing to do it on time is also known. At work place, time bounded activities, also creates a sense of urgency among the players, creating an action oriented, and result based environment.

##### **4.5 Points & Bonuses**

All games have a reward structures. The player gets extra bonuses for achieving milestones; this creates motivation in players to achieve a particular milestone. In a similar way companies should have a reward system which should be based on objective targets.

Scoring System, organizations should develop ways for achieving awards and incentives faster through earning bonus points. The criteria for awarding Points are broadly depend on following key attributes - Speed of Response, Frequency of Participation, Quality of participation and Learning Continuum [9].

##### **4.6 Feedback**

Most of the games have mechanism for feedback .i.e. once the player is done playing, he or she get feedback report of how well they played. The similar feedback system needs to be part of every company. The feedback should be given in a positive manner, on how the individual can improve his performance. This motivates the employees. This feedback is two ways. Just like management can give feedback to its employees, employees can give feedback to their management too. This will bring areas of improvement into the notice of the management.

From pilot to full rollout, employee feedback is essential to create a great user experience. Creating opportunities for employees to easily give feedback will provide learning leaders with the insights they need to make games better. For instance, create quick two- or three-question surveys that live within the game or create a field for employees to leave comments. Remember to always reward those contributions [10].

##### **4.7 Levels**

One of the most important game design elements is levels. In most of the games, once a player clears a particular level, he gets to another level. The same level mechanism can be applied to people in the company to define their ranks. This is usually done through creating several levels in the hierarchy.

##### **4.8 Story Telling**

Many Games have stories, and the story continues as the game progresses. This creates story telling creates the interest of the players. The same technique can be applied to businesses. People need to know the logic of doing a particular task. They need to understand how this task is related to the company's overall strategy.

It is the task of the management to create this link between individual's role and the strategy of the company, as strategy is the future story of the company. People also feel connected with the organization of they are told the history for the company, How was the business started 30 years ago etc.

## 4.9 Aesthetics

The Games are improving in terms of their aesthetics in their every version. Because improved aesthetic, improves interest of players. Companies need to improve the aesthetics of the work stations, paint colors of office. Aesthetics play a vital role in opening up the minds of the employees. Color of the walls or furniture also influence the thinking ability of individuals at work, and creates connect or disconnect in employees. The aesthetics also include the cleanliness, and hygiene factors at workplace, which are critical for employee basic motivation.

### 4.10 Replay or Do Over

All games have options of Replay or Do over. This creates a perception in the minds of the players, that although they once fail to accomplish a mission, it doesn't mean that that the players have ran out of option of giving it a try.

Similarly, organizations need to give space to people to retry, if they fail to achieve a target. And the key lessons learnt from those failures should be notes and recorded. Instead of sacking someone for doing something wrong, the companies shall focus on lessons learnt from those failures. Many companies now encourage employees to make mistakes and learned from them, but don't allow to repeat the same mistakes. This creates a sense of responsibility in the employees and the feel motivated.

### 4.11 Public Acknowledgement

There are a number of games which have employed the feature to share the achievements on social media or with friends. This game design element not only brings honor and satisfaction to the gamer, but also gives his fellow friends playing with him that game to feel motivated to do better or beat that score or level. Similarly people at work also seek recognition, and a company can engage its employees by giving such recognition. The means of which can be awarding the person with the titles like "best employee of the month". Organizations can also include badges that demonstrate and highlights the level of goals achievements by the employee.

## 5. CONCLUSION

The elements of Gamification can be applied to create a sustainable mechanism for employee engagement, the benefits can reaped on the how extensively these elements are actually used at workplace. The key elements which shall be applied are clear Goals, competition and cooperation, time constraints, reward structure, feedback, levels, storytelling, aesthetics, replay or do over. A common implementation of Gamification is to take the scoring elements of video games, such as points, levels, and achievements, and apply them to a work or educational context [11]. This paper has given an overview of what Gamification is and how it can be used within the context of human resource management to have increased employee productivity which will result in better organizational performance.

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