

Gamification, Employee And Emotional Engagement

Leveraging Gamification to Boost Employee Emotional Engagement

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Abstract— This research is aimed at critically examining the concept of gamification and its impact on human activities in the contemporary world, particularly in workplaces or organizations. During the course of the research, other vital concepts like an employee and emotional engagement will also be addressed at length. In order to achieve this aim, the research adopted the positivist philosophical approach as well as a combination of both qualitative and quantitative research. It was discovered that gamification, when applied to human activities, tends to yield a high level of emotional engagement. Similarly, the use of gamification in workplaces enhances employee engagement, competition, motivation and a high level of productivity

Keywords—engagement, employee performance, game, gamification.

I. INTRODUCTION

In a nutshell, the term 'gamification' can be regarded as the process of adding gaming features into quasi contexts like education, marketing, production and business [1]. Due to its high level of impact on humans, it is now frequently utilized in businesses to widen the scope of everyday operations, improve client experiences, and boost key performance measures far beyond its initial purpose. The use of leaderboards, ratings, points, or other sorts of award systems is a frequent form of gamification [2]. However, despite its current popularity in the global business sphere, the concept may be linked back to a century ago; it is in the contemporary world that the alternative names "business game" or "simulation" became attributed to the concept. Reference [3] assert this notion by stressing that the principle of gamification is not novel, but its implementation is. Hence, drawing from this stated assertion, one can comfortably deduce that the idea of integrating gamified elements into reality has always existed on certain levels but in a much more reduced fashion. This conclusion largely dwells on the theory that the life of a

regular human being mostly revolves around relaxing, having a bit of fun and indulging in games. In the contemporary world, gamification has evolved from being largely targeted at children to now being relevant to adults, thanks to the millennial generation's experience with video games. In this regard, [4] stress that playing with data or performing certain behaviors enhances emotional involvement, which leads to more efficient learning. As a result of this knowledge, the concept of gamification is now being identified and implemented in almost all sectors of human activities, particularly in businesses and education.

In this regard, [5] propose that gamification can be grouped into three different categories, namely, external, internal and behavioral modification. Internal gamification occurs in corporations with employees as the central objective. Alternatively, external gamification focuses on the customers of the corporation. It was previously identified that gamification boosts emotional engagement. Hence, customers who are more engaged and motivated are bound to promote more sales. Similarly, employees who are more active and productive are expected to yield better performance [6]. Thirdly, gamification can be applied to behavioral modification when it motivates individuals to improve personal areas in their lives; examples of these areas include; proper monetary management, leading a healthier lifestyle and so on [6]. Hence, the impact of gamification in the contemporary world has produced massive effects. In education, the use of gamification has enhanced the pleasure and enthusiasm in study materials, connecting, teaching and motivating students in improved ways [7]. In addition to that, and via the method of restarting a game after numerous failures, students are encouraged to be persistent and try new things regardless of the results which may emerge [8]. In marketing, gamification, which involves the accumulation of points in return for presents or coupons [9], has enhanced customer involvement, brand loyalty and brand awareness

[10]. In businesses and organizations, gamification has aided in the improvement of employee engagement. However, it is not widely used in this sector as it is in other sectors.

Employee engagement can be regarded as the degree of inclination that an employee exhibits in the operations and events which occur in a place of work [11]. Similarly, the term 'engagement' in this context can be regarded as the emotional, mental or physical processes attached to the performance of particular duties; similarly, the performance of these duties tends to be affected by the enhancement or decrease in motivation and interest [12]. Research has proved that employee engagement aids in the promotion of innovation and increased productivity among employees. Reference [13] assert this notion by implying that the earnings in publicly owned enterprises can either increase or decrease as a result of employee engagement. Sadly, despite the high impact of employee engagement in corporations, it is one of the hardest things to implement in a workplace. Hence, research has proved that losing an engaged employee is 87 per cent less likely than losing a disengaged employee for a corporation [14]. In this regard, [15] stress that employee disengagement can be caused by two factors, namely, when a job is too effortless and when a job is too demanding. Nonetheless, gamification in corporations can be used to maintain a balance between these two characteristics and improve employee engagement.

Owing to these findings, the core objectives of this paper are to:

- Analyze the influence of gamification on the mental, perceptual and emotional engagement of employees.
- Assess the role of gamification in the overall efficiency of the employee.
- Investigate the impact of gamification in regulating the co-relations between employer productivity and engagement productivity.
- Suggest the necessary gamification techniques which will aid in the increase of employee involvement and productivity

Since this research largely borders on employee performance in corporations, it will serve as a good source of information for organizations, managers, directors, employees and researchers. In addition to that, by delving deeper into the concept of gamification in workplaces, this research will add to the existing body of knowledge relating to the proposed concept.

II. LITERATURE REVIEW

Due to its growing popularity, the concept of gamification has been recognized as a crucial area of research in different disciplines [16]. In this sense, several researchers have characterized gamification in terms of its basic form, practical implementation and user benefits. This simply implies that the concept of gamification has no particular definition [17], [18]. In regards to its basic form, the word "gamification" attracted considerable prominence after [19] released their foundational study describing it as "the employment of game design principles in non-gaming situations" in the early 2010s (p. 9). Alternatively, it can also be regarded as the implementation of game design concepts in non-gaming contexts. Alternatively, gamification is regarded as the process of transforming non-

gaming operations to be more game-like with the aid of game design concepts [20].

In addition to the provided definitions, several researchers have also evaluated gamification in terms of its strategic use and user benefits. Hence, [21] regard gamification as the process of inculcating game mechanics and game design techniques in non-game settings in order to design behaviors, improve skills or engage people in innovative activities. In terms of user benefits, [22] stress that game thinking and game mechanics are utilized to engage people and resolve problems. Furthermore, the term 'gamification' has been adopted to describe the creation or implementation of a game in a non-game setting as well as the conversion of an existing system into a game [23].

It was previously established in this research that the concept of gamification was discovered and adopted over a century ago, regardless of its current popularity. Over time, the notion has evolved significantly, thus resulting in its current popularity and meaning. The first record of the use of gamification in a corporation was depicted in Sperry and Hutchinson (hereafter S&H) in 1896, and it was an attempt made by the company to maintain the satisfaction of its existing clients. Retailers, gas stations, and grocery stores received branded stamps from S&H. In addition to that, a special album was provided for customers to store their stamps. A prize exchange from S&H's catalogue was also made available for those who had collected stamps. In the wake of the program's enormous success, similar initiatives have sprung up around the world [24]. Alternatively, the publication of Roy Trubshaw's multi-user computer-based virtual world game MUD1 in 1978 was a watershed point in the history of gamification (Multi-User Dungeon). From the player's perspective, the game was all about obtaining the "wizard" title, which granted the character immortality [25]. Since its inception in 1978, the MUD1 game has acted as a springboard for the ensuing revolution in the multi-user virtual game business, spawning all of today's gamification ideas and techniques [26]. In the contemporary world, the use of gamification as a strategy in different forms of human activities has been employed, and this is owing to the high level of digitization and technology that emerged in this century.

A. Employee Engagement.

The idea of "employee engagement," which can refer to a wide range of emotions, traits, and attitudes and also their underlying causes, seems to be a little vague. For instance, depending on who is using the words "work engagement" and "employee engagement", both terms are of contrasting connotations [27]. In this regard, the term 'work engagement', according to [27] is an individual's relationship with his or her job, whereas employee engagement is an individual's relationship with his or her job and the company as a whole. On the other hand, 'employee engagement' is a term used to refer to both the work environment and the people that make up the workforce [28]. Employee engagement has been characterized as individual or organizational engagement, academic or pragmatic engagement, hard or soft engagement, intermittent or persistent engagement, as well as employee or wellbeing perspectives.

B. Emotional Engagement.

An essential factor used for obtaining a high degree of emotional engagement is depicted in the capacity of the

employer to influence the emotional engagement of the employees in a workplace. In this regard, it should be noted that when people are emotionally committed to their activity, they devote personal resources such as pride, trust, and knowledge. Investing in these resources may appear modest at first, but consider the dedication of employees who are proud of and confident in their workplace. Hence, the good sentiments of pride and trust stem from environmental assessments like cognitive engagements and so on, helping to generate positive feelings and deep emotional engagement for the employees. As a result, these positive feelings momentarily increase an employee's available resources and boosts the critical and creative thinking processes of the employee. Hence, committed employees can comfortably state words like "I have a great feeling of connection and identification with my company," and "I am delighted to be working here".

C. Classic ways of improving Employee Engagement.

People that operate as part of a well-oiled working team are zealous, quick, and efficient in their tasks. The majority of businesses place a great priority on collecting this staff and creating favorable working circumstances for them. Hence, there are numerous methods which can be used to engage employees; however, the first step is for the employer to understand the motivation of the employees and how to enhance and manifest this motivation [29]. The term 'motivation' in this context is regarded as the strong will to carry out a certain plan or activity that is required [30]. Similarly, it is regarded as a cognitive process which controls the behavior of a person. Alternatively, employee motivation is described like the steps made by a corporation to establish an atmosphere that motivates people to execute their jobs well and achieve their objectives [31]. Extrinsic and intrinsic motivation are two well-known types of motivation.

Extrinsic motivation is a type of influence in which the subject is motivated by external stimuli [32]. For instance, money is an employee's primary motive for working; therefore, an increase in pay or additional bonuses will encourage him or her to work even more. However, it should be noted that monetary and non-monetary awards are both extrinsic factors which can be used to motivate an employee. Hence, monetary rewards include wage increases, bonuses, benefits, and discounts. Similarly, company-paid training, gift cards, and company-sponsored business getaways are also regarded as instances of non-monetary awards. Similarly, the art of paying specific fees as penalties for specific actions can also be regarded as another aspect of extrinsic motivation. For instance, an employee who is consistently late or acts unprofessionally at work may face disciplinary action, which may include a monetary fee. However, in order to receive the best results from such punishments, an employer must have the necessary expertise and understanding of each employee and the tailored approaches to use on them.

Intrinsic motivation, on the other hand, can be regarded as a form of motivation which comes from within an individual. Hence, the core difference between intrinsic and extrinsic motivation is the presence or absence of monetary awards. Thus, the job given to the employee is simply carried out for their personal satisfaction and growth. It is worthy to note that, despite the differences between intrinsic and extrinsic motivation, both forms are highly useful in a place of work. Nonetheless, an excellent strategy which can be used to motivate a team will be for the corporation to take note of the

accomplishments of different employees and position these employees as role models for others according to these achievements. This strategy can serve as a strong source of inspiration in a place of work. In addition to that, it will aid in arousing the personal interests of employees as well as the stage in which they will like to picture themselves in the company [33].

D. The purpose of gamification in workplaces.

Gamification may be extremely beneficial to businesses if it is employed to accomplish particular corporate goals [34]. Whilst it relates to gamification in the workplace, the idea is to produce a protracted partnership with employees, not just to make the day a little bit more pleasurable for them [35]. In this same vein, the idea is to urge people to complete a task by introducing gaming elements into ordinary duties, resulting in a sense of engagement and motivation [36]. According to [37], gamification aims to transform disengaged individuals into active and productive participants by utilizing fun and social competition, instead of relying on binary incentives and punishments. In other words, gamification seeks to promote engagement and participation through enjoyable and collaborative experiences. In a nutshell, the general objective of gamification in the workplace is to educate and entertain employees by utilizing games as an instrument for learning in the bid to enhance knowledge and retention (Werbach 2014). Alternatively, gamification is used to educate players on the vitality of devotion as well as the relations between their activities and desired outcomes [38]. Hence, when a game is perceived as enjoyable, the curiosity of the participants will be piqued, and their desire to do mundane or dull chores will be hidden by the enjoyment of game-like, enjoyable activities. The system or surroundings, according to [39], awaken the player's involvement and experience. This is why integrating game-based training into the workplace is important. Dull and disagreeable chores may be made more engaging through gamification, making them more likely to be done repeatedly [4]. It is also possible to sway people's opinions in the process.

In addition to these provided notions related to the purposes of gamification, from a business standpoint, additional goals of gamification are to: engage and motivate people to change their behaviour; have an impact on overall business indicators and activities; achieve certain business objectives previously set; increase retention; encourage loyalty and purchasing actions; reinforce the company brand, and receive direct feedback from customers.

E. The Importance of Gamification on Employee Engagement.

Reference [40] conducted a studying revolving around the use of gamification in workplaces as a tool for creativity as well as employee engagement. The aim of this research was to identify the modes in which gamification can influence employee engagement on an interpersonal, commercial and organizational level. Hence, based on the data provided in the research, it was concluded that gamification has the highest impact on employee and individual engagement. Similarly, gamification was also discovered to have a high impact on awards and performance appraisal among employees, equal treatment, reviews, equality, perceived supervisor support, career advancements and so on. Hence, deducing from these provided findings, one can comfortably state that gamification can be used as a vital

tool for employee engagement in workplaces. This is vital because employee engagement is accompanied by employee motivation and commitment. These tools are important attributes which can be used to improve the general output and productivity in the workplace.

III. METHODOLOGY

This section is aimed at explain the different forms of methodologies which were adopted in the research and the reasons why these methodologies are regarded as conducive choices for the objectives of the research. Hence, the forms of methodologies which will be addressed in this section include; research paradigm, research design and methods of data analysis.

A. Research Paradigm

A research paradigm is a set of procedures, attitudes, and beliefs shared by members of the research community that serve as a route map or guide for deciding the types of challenges that scientists should study and the types of solutions that are accepted by the scientific community [41].

Critical realism, relativism, realism, interpretivism, and positivism are the most often used paradigms in social science research [42]. However, it has been agreed by a number of scholars that the positivist research technique is the cornerstone for organizational and managerial research in the contemporary world. In this regard, the positivist approach dates back to the ideas of French philosopher August Comte, who felt that using techniques based on logic and observation was the most efficient way of learning about people's behavior. Similarly, the essential scientific principles relating to positivism include; parsimony, empiricism, determinism, and generalization [43]. The study uses positivism as the paradigm since it allows for a big sample size. Similarly, it allows for the testing of hypotheses, and the actuality of the research is both palpable and impartial.

B. Research Design

Many scholars have suggested different unique ideas relating to research design. Regardless of these unique ideas, researchers have also concluded that research design has no particular meaning or definition. In this regard, [44] regards research design as a strategy which is used for investigating queries or topics relating to research. Similarly, [45] stresses that research design is a strategy which is used for conducting research which contains a series of concepts as well as modes which are used for data collection and analysis. These terminologies are normally applied to meet the objective provided in the proposed research. Furthermore, additional scholars have labelled the three primary study designs as exploratory, descriptive, or causal in character. Examples of these scholars include; [46], [47] as well as [48].

According to [49], the three approaches to research design include; qualitative, quantitative, and combined approaches. Hence, this study utilizes a quantitative research design (for example, surveys and experiments, data collection and analysis) that is fundamentally in line with positivist claims for producing knowledge through a research design (i.e., cause and effect relationships, testing of research questions and

hypothesis, and applying theories) [50], [51]. Qualitative research, in contrast to quantitative research, uses narratives, visual representations, noteworthy characterizations, opinions, and other expressive descriptions to define a phenomenon in ways that quantitative research does not.

C. Modes of Data Analysis

In regards to data analysis, scholars are graced with two different forms, namely, qualitative and quantitative techniques. The purpose of qualitative analysis is to provide non-numerical data that may be interpreted to provide meaning and build associations. Hence, the quantitative data analysis approach allows the researcher to draw numerical conclusions. Similarly, quantified data can be used to interpret new theories. Reference [52] stress that data screening ought to be done in three different stages. These stages include; assessing all the inaccuracies associated with the data variables, discovering the cause of the problem, and removing or correcting the problem are all examples. These procedures were painstakingly followed in the research. Similarly, descriptive statistics, exploratory factor analysis, confirmatory factor analysis, and multiple regression analysis were used to attain the goals provided in the research.

IV. ANALYSIS AND RESULTS.

This section of the paper provides qualitative analysis, and this is provided as a means of appeasing the objectives provided in the introductory section of this paper.

A. Descriptive Analysis

As stated by [53], statistical analysis is the basic analysis that must be performed prior to the subjection of data to further validity analysis. A descriptive analysis is a summary of statistics that quantitatively describes and summarizes the characteristics of a sample or set of data [54]. Descriptive statistics are further broken into measures of central tendency and measures of dispersion or variability. In this study analysis, descriptive tools of analysis such as tables and charts will be used in presenting the demographic characteristics of the sampled population, including their response to the various variables that make up the study instrument. The descriptive analysis begins with the description of the characteristics of the sampled population, followed by a description of their response to the various variables considered in the study.

TABLE I. DESCRIPTIVE ANALYSIS OF VARIABLES

My job role makes a contribution to my organization	CG1	3.9368	.07190	1.40155
Scale Item	Item Code	Mean	Std. Error	Std. Deviation
There some constraints in form of rules and regulations that must be adhered to in my work environment	GD1	4.2711	.06641	1.29448
There is progression in my work environment	GD2	3.8947	.06981	1.36077
My organization adopts storytelling and narratives in communicating of job functions and motivating employees.	GD3	3.8842	.05694	1.10993
The work environment in my organization is fun and I have a lot fun doing my job	GD4	3.9632	.07166	1.39683
My organization gives its employees set goals with variety of ways to achieve the set goals.	GM1	3.9342	.06746	1.31498
Winning in any given is major part of part of my organization. My organization recognizes task winners.	GM2	4.2079	.06047	1.17872
Every task in my organization has a specific timeframe for completion	GM3	4.0342	.06984	1.36151
Every task given to employees in my organization comes with some challenges	GM4	3.9500	.07002	1.36489
Employees are often rewarded when they complete a given task.	GM5	3.8684	.07450	1.45234
My organization collects feedback on every task given to employees, and employees also receive feedback on executed tasks.	GM6	3.7211	.07033	1.37105
Employees are often given the opportunity to redo a specific task they did well and did not do well	GM7	3.9763	.06722	1.31039
My organization awards employees with points for tasks for achievements on tasks that are so easy to accomplish	GC1	4.0079	.06609	1.28824
My organization gives employees awards for performing exceedingly well.	GC2	3.7658	.06583	1.28330
Leaderboards are often used by an organization in ranking employees based on their performance	GC3	3.6947	.07603	1.48216
Aesthetics are often used in designing tasks in my organization	GC4	3.8184	.07474	1.45692

My organization promotes employees from one level to the other as they progress in the tasks given to them.	GC5	3.8105	.07082	1.38056
I feel safe at work; no one will make fun of me here	CG2	3.9737	.07050	1.37422
I have the resources to execute my job at the level required of me	CG3	3.5737	.07211	1.40573
I have a strong sense of belonging and identify with my organization	EG1	3.6684	.07755	1.51180
I am happy to work here	EG2	3.8132	.06940	1.35294
I am proud of my job and my organization	EG3	3.9237	.07419	1.44630
I have a strong sense of trust in my job and the job environment	EG4	3.7342	.04550	.88696
I truly push myself above what is expected of me	BG1	4.0184	.06996	1.36375
I work more than expected to make my organization succeed	BG2	3.7579	.07147	1.39328
I put in extra time in job	BG3	4.1289	.06251	1.21846
I plan my work so that it is done on time.	TP1	3.7421	.07475	1.45715
My plan is always optimal	TP2	4.5105	.05316	1.03623
I am able to separate main issues from side issues at work.	TP3	4.5026	.04866	.94854
I have in mind the results I want to achieve in my work	TP4	4.6053	.03915	.76325
I set the right priorities.	TP5	4.5526	.04281	.83452
I perform my work well with minimal time and effort	TP6	4.3316	.05258	1.02504
My collaboration with others is always very Productive	TP7	4.1921	.06318	1.23170
I contribute to activities that are not related to a person's regular work duties	CP1	4.2105	.06242	1.21681
I follow the processes and regulations set out by my organization, even though it is difficult	CP2	4.0632	.07132	1.39021
I keep looking for new challenges in my job	CP3	3.9026	.07048	1.37390
I publicly advocate and speak for the organization's goals	CP4	3.8895	.06777	1.32099
I start new tasks by myself when my old ones are finished.	CP5	4.1132	.06656	1.29759

I deal with emergencies and crises at work	AP1	4.0132	.06976	1.35994
I manage work-related stress effectively	AP2	4.1395	.06622	1.29093
I solve work-related problems in a unique way	AP3	4.2421	.06088	1.18670
I display the capacity to adapt to different cultures	AP4	3.8500	.06616	1.28975
I display flexibility in interpersonal situations	AP5	4.0737	.06571	1.28101
I cope with work conditions that are unclear and unexpected	AP6	3.9789	.06507	1.26849
I exhibit flexibility in a physical sense	AP7	3.7421	.07475	1.45715

Source(s): Table by authors

B. Discriminant validity

For a discriminant validity to be considered good, its correlation coefficient must be below .85, with a squared correlation that is below 1 [55]. As indicated in Table 4.2 below, all the correlation coefficients are below the acceptable criteria of .85, with the highest value being .700 to the least being .420. Also, the values of squared correlation are within the acceptable range of less than one recommended initially. Discriminant validity can be created by utilizing Average Shared Variance (ASV), Maximum Shared Variance (MSV), and Average Variance Extracted (AVE). With regards to MSV, the values are less than the AVE values for employee performance, employee engagement, and gamification. The value of the maximum shared squared value is .69, which is less than every value of the AVE of .792 for employee performance, .731 for employee engagement, and .710 for gamification. Thus, with regards to MSV, the discriminant validity is very high. Likewise, the AVE values of every variable in the construct are greater than the values of ASV (employee performance = .480 less than .792, employee engagement = .560 less than .731, gamification = .320 less than .710). This suggests that the discriminant validity of the construct is high. With regards to the AVE, every squared correlation value is below the AVE, and this implies that the discriminant validity of the items in the construct is high.

TABLE II. DISCRIMINANT VALIDITY MEASUREMENT

Constructs	Gamification	Employee Engagement	Employee Performance
Gamification	1.00	.420	.271
Employee Engagement	.174	1.00	.700
Employee Performance	.073	.480	1.00

Source(s): Table by authors

TABLE III. MODEL FITNESS COMPARISON

Fit Indices	Level of Acceptance	CFA Model	SEM Model
(p-Value)	< 0.05	.000	0.000
Comparative Fit Index (CFI)	> 0.9	.931	.931
Root Mean Square Error of Approximation (RMSEA)	0.03 - 0.08	.071	.071
Normed Chi-Square	< 3	2.097	2.097

Source(s): Table by authors

As shown in Table 4.2 above, SEM and CFA model index value without changes in the values of both models shows validation of the SEM model [55]. Thus, the study went further with the SEM path analysis in order to test the study hypothesis specified in the first chapter of this study.

From the direct effect and mediation analysis result presented in Table 4.7 below, it can be seen that gamification has an insignificant negative effect on employee performance since the coefficient of gamification is negative (-.023) with a probability value (.742) greater than .05. However, findings indicate that gamification has a significant positive effect on employee engagement with a coefficient of .420 and a p-value of .000. This implies that a 1 unit increase in gamification will bring about a .420 unit increase in employee engagement.

Likewise, employee engagement was found to have a direct influence on the performance of employees with a coefficient value of .710 and p-value of .000, implying that a unit increase in employee engagement will bring about a .710 unit increase in the performance of employees.

The study findings also indicated that employee engagement has a significant moderating influence on the causal effect of gamification on the performance of the employee. This is indicated by the coefficient of gamification (.310) and p-value of .000. This implies that a unit increase in gamification will bring about a .310 unit increase in employee performance through the increase of employee engagement by .420 units.

TABLE IV. DIRECT EFFECT AND MEDIATION ANALYSIS

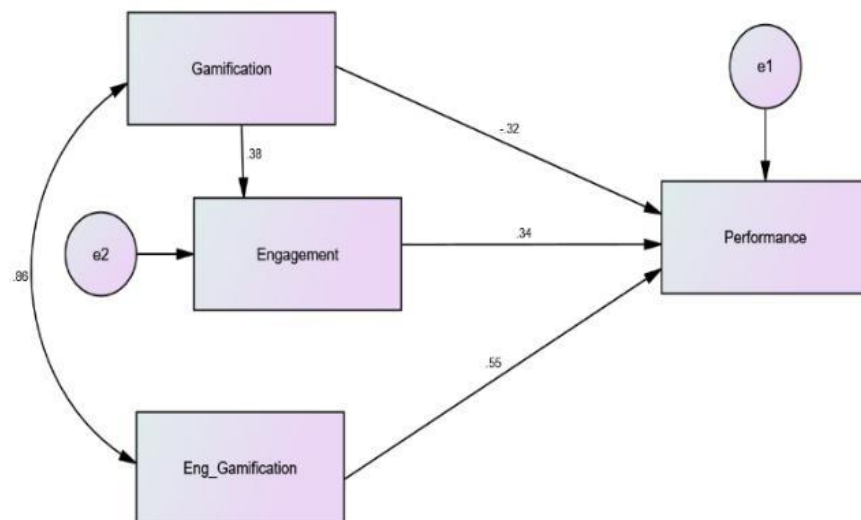
Effect			Coefficient	S.E	C.R	Sig
Gamification	→	Engagement	.420	.064	4.951	.000
Engagement	→	Performance	.701	.108	7.108	.000
Gamification	→	Performance	-.023	.056	-.328	.742
Gamification → Engagement → Performance			.310	.062	-	.000

Source(s): Table by authors

In order to check whether the third hypothesis (H3) can be accepted, the entire SEM model was tested via the adoption of observed variables. Figure 4.3 below shows the coefficient of

each path after the inclusion of the interaction variable in order to check the moderating effect of gamification on the causal influence of employee engagement on employee performance.

Figure 1. Research Model



Source(s): Figure by authors

Fig. 1. Moderating effect of gamification

As shown in Table 4.5 below, there is a direct significant negative effect of gamification on the performance of an employee with a coefficient of -.320 and p-value of .0.000. Also, employee performance is positively and significantly influenced by employee engagement. The interacting variable engagement-gamification has a direct significant positive influence on the performance of an employee with a

coefficient of .601 and p-value of .000. Since the independent variable and moderator (employee engagement) and the interacting variable have significant effects on employee performance, then gamification has a moderating effect on the relationship between employee engagement and employee performance. Thus, hypothesis three (H3) is accepted.

TABLE V. MODERATING EFFECT

Effect	Coefficients	S.E	C.R	P
Gamification \rightarrow Engagement	.379	.062	6.069	.000
Gamification \rightarrow Performance	-.320	.090	-2.756	.000
Engagement \rightarrow Performance	.339	.050	5.395	.000
Engagement \rightarrow Gamification \rightarrow Performance	.601	.014	4.918	.000

Source(s): Table by authors

V. DISCUSSION.

According to the findings and results provided in the study, it is clear that gamification has a substantial favourable impact on employee engagement. This discovery is further asserted by [56], who claim that gamification may be used to improve employee engagement in the workplace since it has an interactive component that makes completing tasks more exciting. Encountering new problems, strategic thinking, and problem-solving are some of the basic actions that may be observed when playing a game. Every game has a purpose, and user engagement is largely determined by their motivation and experience in achieving that objective. Alternatively, the results of this study have demonstrated that gamification has a small negative impact on employee performance.

This contradicts the findings of another study, which revealed that gamification has a considerable beneficial impact on employee performance [57], [58], [59].

Furthermore, it is underlined that providing proper compensation and reviews to employees at the appropriate time is critical to the success of a gamified system.

According to [14], the link between employee performance and gamification has been found to be uneven across settings and can play a detrimental influence in certain circumstances. Similarly, it is worthy of note that the incorporation of gamified systems in workplaces ought to align with the goals of the organization; otherwise, it will be a waste of employee involvement. This will be so because the incorporation of games will only serve as a form of entertainment to the employees and nothing more.

Alternatively, this study agrees that employee engagement has a favourable and significant impact on employee performance. This is consistent with previous research, which revealed that employee involvement leads to improved employee performance [60], [61], [62], [63]. Gamification settings are made up of highly engaging game components like leader boards, awards, challenges, and a variety of other awards, challenges, and a variety of other aspects that can boost motivation and guide the achievement of desired goals. It has to do with gaining attention through a reward system or the chance of bragging rights if one is placed on a leader board. This notion is backed up by previous research that revealed that employee engagement has a beneficial impact on staff performance.

Finally, previous research has revealed that employee engagement has a partial moderating effect on employee performance [61], [64], [65];

however, this study found that employee engagement had a total moderating effect. This study confirms that gamification has no direct impact on employee performance; instead, gamification has an impact on employee performance through employee engagement and other interventions. Furthermore, for gamification to succeed, employees must first be engaged with a system, and the material must be relevant to their work performance.

According to [66], gamification is an important technique for increasing employee engagement, and implementing it as part of a performance management system will benefit the company.

VI. CONCLUSION.

The use of gamification as a tool for employee engagement and performance management was investigated in this study. In order to achieve its goals, the study used structural equation model analysis (SEM). The primary goal of this research was to look at the impact of gamification on employee engagement. The study indicates that gamification improves employee engagement in terms of this target (objective one). The second purpose was to look at the impact of gamification on staff performance. The study indicates that gamification does not directly contribute to enhanced employee performance in this target or increased staff productivity (objective two). The third goal was to look at the role of gamification in mediating the link between employee performance and engagement. Employee engagement fully mediates the link between employee performance and gamification, according to this target (objective 3). It has been found that increasing gamification in the workplace will increase employee engagement, which will lead to increased employee performance.

Alternatively, according to the findings of this study, gamification is one of the critical aspects that impacts employee engagement via the incentive system and other characteristics that encourage employees. In addition to that, this research also contributes to ideas of motivation and determining employee success. Employee engagement and gamification are two critical predictors of employee success in businesses. This innovative addition to theory goes beyond the currently available theoretical relationship between gamification and non-game environments. Hence, the practical consequence of this study is that the findings discovered and stated in it can be used as a tool for guidance and further research among human resource managers. In addition to that, these findings will aid in designing appropriate training by including gaming components, and this will go a long way in the enhancement of motivation, performance and entertainment among employees.

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