

GAMIFICATION IN BUSINESS FOR GEN Y

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ABSTRACT :

Even after hiring the best teams and providing best online training courses using multimedia, still managers find low learning effectiveness in employees. The reason is primarily the workforce and its approach towards learning. Today the corporate world has combination of Gen X and Gen Y workforce whose approach towards digital world is quite different. The main characteristics of Gen Y is its love for technology and they have different values and beliefs regarding family, career, learnings, loyalty, gender roles, the environment and expectations from people as compared to Gen X. So in future it is essential that there should be a paradigm shift in the approach to Learning and development for Gen Y. Looking into the characteristics of Gen Y and their descendants (sometimes referred to as Gen Z are people born after 1995 few of whom are just adults and have never known a life without the internet, computers and mobile phones³) are mostly digitally active and derive instant action and satisfaction by using the internet technology. In order to utilize the best of their potentials (further in paper wherever Gen Y is mentioned it will include Gen Z as well), Gamification seems to be a logical answer because the new education system needs to engage, recognize their interests and develop a self-learner attitude in students. It is observed that when words like play, fun, and games are mentioned, a positive energy is generated in the people and the environment. Hence developers and educators are looking at gamifying the learning processes. The term 'Gamification' simply means applying game mechanics in non-gaming environments so as to make processes more effective. In recent years this term is making a buzz in many sectors including business, management, training, health, social policy, and education. This conceptual paper is an attempt to understand the effect of game thinking and game mechanics into understandable behavioral elements of Gen X and Gen Y in non-game environment.

Keywords: Gamification, Gen Y, Motivation, Engagement, Game Dynamics.

Introduction:

Karl M. Kapp in his book *The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education* has said, "If you want to learn more, play games". This statement needs a deeper introspection from the academicians, teachers, corporate trainers, or instructional designers. What Kapp in his book has highlighted that a successful gamification process can infuse a sense of accomplishment and mastery which in turn can lead to increased motivation, behavior change and ultimately a real learning.

Gen Y a relatively new term in society, is gaining more and more attention. Echo boomer or millennial or iGen or Net generation are different synonyms for Gen Y. Members of Gen Y are often referred to as "echo boomers" because they are the children of parents born during the baby boom (the "Baby Boomers"¹). The Gen Y are the people born during the 1980s and early 1990s and since they have had constant access to technology (computers, cell phones) in their youth, they have inspired many employers to update their hiring strategy and incorporate updated forms of technology at workplace. For the Gen Y means of communication is mainly through online communities and social Medias like Google, Twitter and Face Book rather than personally meeting their friends and developing relationships. They are capable of belonging to huge communities and have massive collaborations using the Internet without knowing anyone personally.



(Word cloud derived from the abstracts of the papers ¹⁷)

Gamification is the concept of applying game mechanics and game design techniques to engage and motivate people to achieve their goals. It is observed that when words like 'Play', 'Games', 'Mission' and 'Fun' are used in front of people, they get energized and excited. Hence this mechanism is being extensively used for children to learn the curriculum subjects. Recently many apps are developed to help children learn maths by a Company named Logic Roots⁴. Till today Logic Roots have developed 16 Board Games which include a tournament for rats as a tool to learn multiplication tables. Similarly game called 'Ocean Raiders' help in teaching addition, and 'Monkey Fractions' help in teaching fractions to children. On similar grounds, games are being used in Medical areas for dealing patients suffering from chronic ailments and also in research and development. Researchers at the University of Washington in Seattle used an online puzzle video game named 'Foldit' which posed complex puzzles about the folding of protein. In 2011, the game's 240,000 registered players were invited to configure the structure of enzyme associated with the AIDS virus. Tracking their scores, Foldit players solved the problem in three weeks that had stumped scientists for 15 years.⁵

Similarly, 'Pain Squad', a mobile game designed for patients suffering with Cancer. Fighting cancer is very painful and patients feel lonely and despaired. Doctors during their treatment need to keep a pain journal with the patients, so that they can record the pain duration and frequency as well as what works well. Canadian company Cundari designed a role playing cop game with mission and rewards to log their pains. This way doctors and researchers were able to collect data which helped in defeating cancer. Gamification is being pushed into every facet of our lives including the use of iPads and other devices on a daily basis, teachers assigning homework to students based on their self-learning. Similarly there many other games which continue to be source of research and development.

Gamification and business management :

Games tap the natural competitive drive of human beings. Today with the help of advancement in technology and social media, one can create their virtual farm or play scrabble with a friend in another country. Moreover technology is opening avenues for the extensive use of games in business and so-called gamification is gaining as hottest trends in human resources this year.

With technology taking a central space in our life, the companies in order to attract and engage today's generation have started to extensively use game and gaming in all the aspects of peoples' life. The two major forms that are distinctively used are:

1. Serious games- a game whose main purpose is something beyond entertainment, i.e. education, advertising or behavior shaping.
2. Gamification- the use of game mechanics and/or game design principles in contexts other than games.⁶

According to Karl Kapp, Professor of Instructional technology at Bloomsburg University in Bloomsburg, Pa., consultant and author of *The Gamification of Learning and Instruction Field Book* (Wiley, 2014), there are two basic types of Gamification- Structural Gamification and Content-based Gamification. In Structural gamification, gaming elements like badges, points, etc. are added to existing content to help people move through it. While in Content based gamification, content is modified into a game with business objectives at its core.¹⁰

Accenture Technology Labs are using this opportunity for industrializing the development of games and gamification and also to incorporate gamification into business processes. Developers of serious games can now leverage general - purpose “game engines”- such as Unreal Engine - which provide graphics, game editors and artificial intelligence to power sophisticated games with simulated characters. Similarly, vendors like Bunchball Inc. and Badgeville Inc. have created cloud-based gamification engines that deliver key gamification functions as Web services, greatly reducing the cost and complexity of incorporating gamification into Enterprise-Web applications.⁶

Similarly Microsoft included the Solitaire application (Game) in its release of Windows 3.0 in 1990 to help acquaint its users with the newly introduced click-and-drag functions of the mouse.

The result of gamification in advertising the product can be witnessed for Nike in sports shoe category. In this Campaign, in 2011 customer were promoted to record their personal running goals and reach milestones through Company’s app wherein they were rewarded by celebrities. This helped the company to boost its revenue by 30 percent.

Today gamification is being used in following areas of HR:

- Competency development
- Employee’s performance review
- Improve Talent Acquisition and Management
- Cultivate Corporate Culture and Retain Valued Employees
- Motivate Employees to Learn and improve productivity
- Incentivize Paperwork and Other Administrative Requirements
- Map the Path to Career Success

Why Gamification?

Since ages games have always entertained and enthralled people, be it the first Olympics in Greece or the latest Xbox offering. The reason why people spend so much time on games is a question that researchers are trying to answer. Gamification is essentially integrating game design thinking to work-based applications so that organizations are able to acquire competitive strategy and employees gain knowledge and at the same time have fun. This helps because-

- The human brain is conditioned at birth to play games. The very first learning occurs through games.
- Gaming offers employees the opportunity for self-assessment and appraisal in their skills.
- Employees are mostly self-motivated to move ahead for their objectives.
- Incorporating games leads to a better educational experience by adding realism, fostering competition and delivering quicker progress feedback. This leads to improved problem solving and collaboration skills, higher learner engagement and greater knowledge retention.

While designing games, Accenture focuses on following seven elements¹² –

- Status:* Gamers are motivated by the recognition within their social community. So game mechanism should be designed in such a manner that it enhances player's reputation.
- Milestones:* Levels are very essential in energizing the participants or people. This enables the participants to perceive progress through incremental accomplishments. Example can be accumulation of reward point and free gifts for these reward points.
- Competition:* Games should be designed in such a manner that it promotes participants to share and compare themselves with the others. It helps in better engagement.
- Rankings:* Visual displays of progress and rankings help participants track their performance against both their own goals and the performance of others. The rankings tap into people's natural competitiveness and encourage them to do better, boosting repeat visits motivated by the desire to improve their position.
- Social connectedness:* A successful gamification initiatives need to create a strong sense of community. People join to play the game only if their friends are playing it and there is regular interaction with them through the game.
- Immersion reality:* The games should be designed in such a manner that the participants are immersed in its virtual reality.
- Personalization:* The ability to customize promotes a sense of ownership in the game through self-expression. Participants in the game may use their personal challenges for getting personalized gifts which motivates them to play it more effectively.

Underlying Dynamics of Gamification:

A successful game design should focus on-

- *Freedom to fail* - In any gaming design, if players are allowed to experiment without fear of causing an irreversible damage, it motivates them to be more innovative and explorative in approach to problems.
- *Rapid feedback* - . Frequent targeted feedback is highly prevalent in game design. The games are designed in levels and at each level, there is frequent and targeted feedback which ensure practices of learning of that level. According to, James Gee level design ensures players get lots of practice applying what they have learned.
- *Progression*- Progression is seen throughout game design in the form of levels or missions. It is recognized in modern pedagogy as 'scaffolded' instruction. Beth Kemp Benson describes scaffolded learning as framing, guiding, and supporting students by organizing information into categories in order to focus attention.¹⁴

Progression is also linked with game dynamics as ‘the interest curve’ and ‘just in time teaching’. The idea of the interest curve is that by purposefully sequencing events in a particular order, engagement is increased. . Just in time teaching refers to the process of gathering assessment immediately prior to a lesson, so as to tailor the lesson to the specific needs of the students at that particular time.¹⁴

Storytelling - According to Kapp, games are more effective, if they employ some story. For example ‘Monopoly’ tells a story of becoming rich through property ownership at the risk of losing it all.¹⁴

Literature review:

The growing interest in Gamification stems from a desire to enhance the level of engagement in people, employees, students, learners. It brings more visibility, openness and a system of rewards and recognition into the workplace.

Beresford defines “gamification” as using game mechanics — like leader boards, badges or a point system — to modify behaviors outside the game atmosphere. “At its best,” he said, “gamification provides an element of fun to how work gets done.” But each mechanic works differently, he added. Leader boarded, for example, gives transparent feedback using a point system that employees are able to track against their peers. “After all, we are social animals and want to see where we stand in relation to others,” he said.¹³

Gabe Zichermann (2010) defines gamification as “the process of using game thinking and game mechanics to engage audiences and solve problems.”¹⁵

In order to verify that web based education can be an effective tool for motivation and engagement, some researchers have done experiments using gamification plug-in (which better known as eLearning platform) in the university curriculum. Gamification gained widespread recognition in the second half of 2010, when several industry players popularized it.

Halopedia is the fourth most active wiki and this shows that gamers are in fact engaged in a highly collaborative effort to understand their favourite game. And this is just a small indication of the valuable skills these on-line communities develop. So, as McGonagall (2007) suggests, it is about time to use these skills and help gamers to contribute to society by helping solve real-world problems.¹⁵

Research gap:

Serious games and gamification in HR are still in nascent stage of development, and have started making way in different functions of HR like in Recruitment, Training, Sourcing, Performance Management etc. It can also be used as a promising tool for learning activities like on boarding, safety education, product training, career development and team building. The purpose of gamification as a design concept is to develop desired behaviors e.g. sharing on social networks, generating content or surveys, participating in training and generating new ideas to improve a product. Hence the designing of games should be done with proper analysis of Game mechanics which will have desired outcome in the form of changed behavior of the participant.

Game mechanics Vs. Human behavior:

As analyst firm Gartner points out, “For a gamified application truly to engage its audience, three key ingredients must be present and correctly positioned: motivation, momentum and meaning (collectively known as ‘M3’).” If a gamified application misses any of these ingredients, runs the risk of falling into disuse once their novelty wears off.¹⁵

Jane McGonagall (2010) deals with the question of why so many people around the world immerse themselves in games and what it is that drives them to stay away from real life. She labelled gamers as “super-empowered hopeful individuals that exhibit four distinctive behavioural traits:¹⁵

1. Urgent Optimism – the desire to act and the belief in achieving success.
2. Social Fabric – the ability to trust and form stronger social bonds through game playing.
3. Blissful Productivity – the belief that the task they are engaging with is meaningful, hence the dedication towards the game task itself.
4. Epic Meaning – the strong attachment to a meaningful and awe-inspiring story that they are personally involved in and striving to make their mark on it.¹⁵

Game Mechanics: Gamification is all about applying game mechanics to non-game activities, which results in a change of behavior and brings a sense of engagement. Hence game mechanics is simply any of the techniques used to gamify an application. Hence game mechanics are the various actions, behaviors, and control mechanisms that are used to ‘gamify’ an activity.

Those can be typically:

1. Points
2. Levels
3. Challenges/Trophies/Badges/Achievements
4. Leader boards
5. Virtual Goods
6. Visual cues/ visual storytelling
7. Gifting & Charity
8. Social Feedback

Points can be used to reward users across multiple dimensions, and different categories of points can be used to drive different behaviors within the same site or application. E.g. experience points (XP), skill points (score, rank) and influence points (rating, reputation) etc. Levels are a system, or “ramp”, by which players are rewarded by an increasing value for accumulating points. Levelling is one of the highest components of motivation for gamers. There are typically three types of levelling ramps: Flat, Exponential and Wave Function. Challenges/Trophies/Badges/Achievements work in a similar way and in principal they give people missions to accomplish and then reward them for doing so. Trophies, badges, ribbons, etc. are the visible recognition of having reached new levels or completed challenges. In the context of gamification, leader boards are used to track and display desired actions, using competition to drive valuable behavior.¹⁵ Virtual goods are a great vector for creativity, competition, and self-expression in the community. Competitions enable the players to challenge each other for a high score at a game.

Game Dynamics: The terms game mechanics and game dynamics are closely related and used interchangeably. Game dynamics are the reason why people are motivated by game mechanics. Humans have needs and desires that are universal and across generations, demographics, cultures, and genders. Game designers know very well how to address these needs within gaming environments. Game dynamics essentially is the compelling and motivational nature of gaming experience which results in certain human desire. It includes reward, status, achievement, self-expression, competition and altruism, among others.

Reward- Human beings are motivated by receiving a reward, tangible or intangible, which causes change in behaviour. With gamification, the primary reward mechanism is through earning points. But obtaining virtual goods, levelling-up, and even completing achievements also satisfy this desire.

Status- Most humans have a need for status, recognition, fame, prestige, attention and, ultimately, the esteem and respect of others. A lot of people are motivated by a need to achieve, to accomplish something difficult through prolonged and repeated efforts, to work towards goals, and to win.

Achievement- People motivated by achievement tend to seek out challenges and set moderately difficult (but achievable) goals.

Self-expression- Many people want and need opportunities to express their autonomy and originality. They want to distinguish themselves as having unique personalities from those around them. This ties into the human desire to show off a sense of style, identity, and personality and to show off an affiliation with a group. Using virtual goods is a common way for players to create their own identity, whether they are earned through rewards, received as gifts, or bought directly with real currency.

Competition- Individuals can also be motivated by competition. It has been proven that higher levels of performance can be achieved when a competitive environment is established and the winner rewarded. That is because human beings gain a certain amount of satisfaction by comparing their performances to that of others. The use of leader boards displays competitive results and celebrate winners.

Altruism- Gift giving also helps in motivating individuals as they look up for healthy relationships.

| Game Mechanics | Human Desires | | | | | |
|-------------------|---------------|--------|-------------|-----------------|-------------|----------|
| | Reward | Status | Achievement | Self Expression | Competition | Altruism |
| Points | ● | ● | ● | | ● | ● |
| Levels | | ● | ● | | ● | |
| Challenges | ● | ● | ● | ● | ● | ● |
| Virtual Goods | ● | ● | ● | ● | ● | |
| Leaderboards | | ● | ● | | ● | ● |
| Gifting & Charity | | ● | ● | | ● | ● |

Figure 1 illustrates the interaction of basic human desires and game play. The green dots signify the primary desire a particular game mechanic fulfills, and the blue dots show the other areas that it affects.

The above figure is adapted from *Gamification 101: An Introduction to the Use of Game Dynamics to Influence Behavior (White paper)*¹⁶. From the above figure it can be interpreted that each game mechanics essentially fulfills a primary desire in human being among other secondary desires. For example 'Points' primarily help to instigate a feeling of being rewarded in the player. Apart from being rewarded, it also influences the other desires like status, achievement, competition and altruism. Similarly it goes with other game mechanics tool.¹⁶

Hence gamification can bring changes in methodologies of the digital age if a customized mechanism is used to affect desired user engagement. This customized approach to gamification can lead to high productivity especially of Gen Y.

Future Research:

Elaborating on the above concept, a working hypothesis is being proposed for future research. Assuming that there is a possible correlation between game dynamics and related human desire in Gen Y, can it be statistically proved that whether this correlation exists in Gen Y. If yes then to what extent one game mechanics affects the human desire elements. Knowledge about the right game mechanics to instigate right human desire in Gen Y will definitely lead to higher productivity and improved employee engagement.

Conclusion:

Gamification is not merely creating a game but it refers to making learning in human beings more fun and engaging. It also aims at making it more interesting, motivating and productive. A meaningful game for any business organization should definitely provide a positive and meaningful gaming experience to the employee or the player. This will benefit the organization in the long run. Meaningful gamification should focus on introducing apt game mechanics which will subsequently induce right game dynamics for Gen Y. Customizable gaming systems (for similar type of work) if developed in organizations will have more impact and result in higher productivity than a generalized one. Hence user-centric and meaningful gamification will have deeper engagement between participants (employees), non-gaming activities (jobs) and the organizations.

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