

Let the Games Begin Using Game Mechanics to Drive Digital Transformation



Why Gamification Matters Now?

A US insurance giant was struggling with inefficient claims processing leading to long turnaround times for its customers. It wanted to streamline its complex processes and used a gamified social innovation tool to draw ideas from its employees. The initiative saw self-driven participation without any attached reward component. The chance to collaborate on simplifying their workflow was the primary driving factor for the participants. The activity resulted in a new, simplified process, which saved the company \$18 million a year and increased worker satisfaction.1

Over-hyped or duly justified, enterprise gamification — the application of game design techniques to a business setting in order to make tasks more fun and engaging — is garnering attention from business leaders, world over. Enterprise gamification is expected to exponentially increase over the next couple of years. Research indicates that by 2015, more than 40% of global 2000 organizations will have at least one application where gamification will be used.²

Gamification is an **Enabler for Digital** Transformation

While organizations have ramped up their investments in digital tools and technologies, two-thirds of digital transformation projects fail mainly due to workforce behavioral issues.³ Our latest research with the MIT Center for Digital Business indicates that

55% of companies surveyed cited company culture, particularly employee resistance to job changes, to be a major hurdle to digital transformation (see Figure 1).⁴ We believe that enterprise gamification, when designed and implemented effectively, can help accelerate digital transformation by driving employee engagement and supporting change management.

In this paper, we explore the building blocks of successful gamification and provide an outline for how organizations should approach gamification as part of their digital transformation.^a

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Note: Percentage of firms encountering gaps in skills, IT or culture as mentioned by their executives. Some firms are encountering more than one gap.

Source: "Digital Transformation: A Roadmap for Billion Dollar Organizations", Capgemini Consulting and MIT Center for Digital Business, 2011

^a Scope of this paper is limited to addressing the application of gamification for employee engagement; customer engagement is not covered in this paper.

Gamification Helps Overcome Key Digital Transformation Hurdles

By 2015, 40% of global 1000 organizations will use gamification as the primary mechanism to transform business operations.



Enterprise gamification drives positive outcomes in five key business areas: change management, employee engagement, employee training and learning, innovation and process efficiency (see Figure 2).

Gamification Accelerates Change Management

Gamification mimics elements of real-world business situations and makes it more engaging by giving real-time feedback and awards which help employees nimbly adapt to new processes, systems and business models. Higher employee engagement in game-like settings leads to lower resistance to change which helps in accelerating digital transformation.

For instance, after installing a new event logging system for its salespeople, a mid-sized firm saw very poor adoption rates from its employees since the team was comfortable with the old system. In order to increase adoption, the company ran a week-long sales competition where every event logged would get a point and the employee with the highest points would get a \$100 gift certificate to a local restaurant. During the week of the contest, the number of events logged shot up over 750% and four weeks after the contest was over, the number of events logged per week held steady at around 6x of earlier values due to effective behavioural change of the salespeople – a significant increase from the pre-contest results.⁵

Gamifying Processes Helps Drive Employee Engagement and Compliance

Engaged employees often show higher productivity and are likely to be more loyal to the organization. Research reveals that engaged employees put forth 57% more effort and are 87% less likely to leave their company than employees who consider themselves disengaged.⁶ Clear rules of engagement, short-term achievable goals, accelerated feedback cycles and recognition of accomplishments in gamification helps drive employee engagement and motivation. This leads to successful transformation

programs and quantifiable business benefits. LiveOps Inc., which runs virtual call centers, offers a good example of using gamification to drive engagement and compliance. The company gamified its processes by converting them into a competition, in order to help improve the performance of its 20,000 call agents. It began awarding agents with virtual badges and points for tasks such as keeping calls brief and closing sales. Leaderboards allowed the agents to compare their achievements with their peers. Such gamified processes reduced call times by 15% and improved sales by 12%.7

Gamified processes at LiveOps Inc.'s call centers reduced call times by 15% and improved sales by 12%.

Figure 2: Business Impact of Enterprise Gamification



Gamification Speeds up Employee Training and Learning

Lack of requisite skills can be a significant impediment to digital transformation.⁸ Many firms have launched digital training programs to bridge this gap; for instance, Intel launched "iQ", an employeecurated social media and learning platform. Gamifying digital training programs accelerates the learning process. This is especially true for the technology-savvy Generation Y (Gen Y) workforce, which struggles to sit through lengthy, non-interactive presentations. A recent study found that trainees using video games had 11% higher factual knowledge levels, 14% higher skill-based knowledge levels and 9% higher retention rates compared to trainees within a passive learning environment.⁹

People trained on virtual games retain more facts, attain higher skill levels and retain information longer.



Gamification of the On-Boarding Process at InMobi

During their rapid expansion, InMobi, an Indian mobile advertising startup, increased their headcount by 10% each month. The HR team was not prepared to handle this growth, which resulted in several challenges such as on-boarding delays, unavailability of executives to deliver training sessions and lack of systems to track on-boarding progress.

The firm partnered with a gamification company to leverage its learning platform to deliver new hire orientation as an online social game. The new hires learnt about different aspects of the company through a gamified experience in a team setting, with badges, points and prizes for top scorers. This approach proved to be effective, resulting in a more engaged and productive workforce within a shorter time frame than previously experienced.

Source: Case study from Mindtickle – a firm providing companies with gamified learning solutions.

Gamification Drives the Pace of Innovation

Gamification helps create an environment that facilitates creativity, fosters peer collaboration in a fun, competitive environment and moves innovation out of a siloed structure. Innovation games are useful for problem solving and in shortening "time to revenue" through their ability to leverage crowd-sourcing. Crowd-sourcing new ideas through competition and reward-based systems are all applications of game mechanics and are already popular across organizations (see insert on UK DWP).

Gamification Improves Process Efficiency

Process redesign, digitization and streamlining play a critical role in an organization's cost reduction strategy. Gamification helps drive these elements forward. For instance, Google reduced its travel expenditure by using game mechanics. Employees were given the option of saving the per diem amount provided for their business trips and using it towards another trip (which would have had no budget) or upgrade to a higher class or cash out a part of it. The initiative proved successful, resulting in over 90% compliance with the process.¹⁰

In the next section, we dig deeper into the psychological aspect of gamification and what makes it successful.



Research predicts that by 2015, more than 50% of organizations will gamify their innovation processes.



DWP Gamification Driving Innovation at the UK Department for Work and Pensions

The UK Department for Work and Pensions (DWP) created a market game called "Idea Street" to decentralize its innovation process and to crowd-source ideas from across the organization. Game mechanics such as points, leader boards and a "buzz index" were used to motivate the employees. The ideas submitted not only earned points but also rank and social status within the community. Within the first 12 months, this exercise generated 1,400 ideas, 63 of which went forward for implementation. The employees thrived on the challenge of finding new solutions and getting recognized for it, while the organization is expected to save £20 million by 2014-2015.

Source: Government Computing, "Gamification for the public good", June 2011

Why Gamification Works

Up until the recent past, enterprise gamification was perceived as an experimental activity. Gamification today however, has moved mainstream, as a result of increased research and enhanced understanding, thereby making it better suited for enterprise application. Another key factor in its growing popularity is the rise of the Gen Y demographic in the workforce and their affinity to game-like environments.

Gamification Masks a Science beneath Badges and Awards

Social games create an environment that is inherently engaging and competitive. Gaming mechanics incentivize humans through intrinsic motivators such as status, sense of achievement, sense of pride and through external motivators such as financial rewards, badges and promotions. B.J. Fogg, an experimental psychologist at Stanford University, USA developed the Fogg Behavior Model (FBM), in 2009, which shows that three factors need to be present to influence human behavior: motivation, ability and trigger (see Figure 3).

Figure 3: Science of Gamification - The Fogg Behavior Model



Source: Lithosphere, Science of Social Blog – "Gamification 101: The Psychology of Motivation"

Gamification simultaneously utilizes all the three factors stated in Fogg's behavior model, which positively influences human behavior and results in a successful gaming system.¹¹ For instance, Target Corporation, a US-based retail giant, gamified its cashier checkout system (trigger) for driving behavioral change and process efficiency. Employees were scored based on the transaction's speed and accuracy (ability). A feedback mechanism using visual and audio cues was built into the system as a way to create positive reinforcement (motivation). This resulted in increased job performance, reduced checkout times, and improved employee morale.¹² Most enterprise gamification tools leverage Fogg's three factors simultaneously in such a way that once connections are made with the players, the tools sustain these interactions, thereby promoting an environment that is both enjoyable and productive.

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Gamification Appeals to the Growing Younger Demographic in the Workforce

Research indicates that Gen Y represents 25% of the current global workforce and their numbers are growing rapidly.¹³ A recent survey indicated that Gen Y employees expect their jobs to be social and fun, with clear goals to succeed, and which provide personal satisfaction. They want regular feedback on their performance and recognition for their work.¹⁴

Gamification creates new methods to reach out to the specific requirements of Gen Y employees. For instance, global hospitality major, Marriott Hotels used gamification as a recruitment tool. It launched the app My Marriott Hotel on Facebook for motivating potential Gen Y hires to participate in managing a virtual hotel restaurant. Players earned points for happy customers, lost points for poor service and won rewards when their operation turned a profit. Players with high scores were considered for next levels of the recruitment process.15

The concept of game mechanics resonates with the motivational

requirements of the Gen Y workforce. Further, it also helps address potential skill gaps in large-scale digital transformation, accelerates the pace of change and shortens business cycles. In the next section, we discuss some of the common pitfalls of enterprise gamification that firms should keep in mind.

The Fogg Behavior Model shows that three factors need to be present simultaneously to design effective Gamification – motivation, ability to complete a task and a timely trigger to act.

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What are the Common Pitfalls to Effective Gamification?

Many firms are adopting gamification due to the current hype around it but most implementations lack thorough planning and understanding of the concept and its business application. It is estimated that by 2014, 80% of current gamified projects will fail due to poor design.¹⁶ There are multiple challenges in the implementation of Gamification. The most common issue is low adoption of the gamified platform due to poor game design and game fatigue.

Excessive Focus on Extrinsic or Intrinsic Motivators Leads to Sub-Optimal Results

Flawed game design causes many gamification implementations to fail. An excessive focus on extrinsic motivators (badges, points, or leader boards) rather than on more important intrinsic motivators (status, sense of achievement, and collaboration) results in poor game design.

On the other hand, too much focus on intrinsic motivators, without any focus on rewards may not motivate all employees and can fail to achieve the intended results. Best results are seen when the game design efficiently balances both- external and intrinsic motivators. For instance, a professional services firm in the US gamified its internal communication process to help employees learn the names and faces of their 2,000 colleagues across the country. To encourage participation, a leaderboard was created, which failed to draw interest from employees as people did not bother to check their personal score. However, when teams were created, it triggered the intrinsic human motivational factor of collaboration and participation increased from 5% to 90%.17

Inability to Sustain User Interest Leads to Game Fatigue

A well-designed gamification system aims to keep players engaged without getting prematurely bored (if too simple) or disillusioned (if too complex).

User fatigue is a common issue associated with long-term use of gamification. Even with a welldesigned gamified application, it is not easy to sustain user interest over prolonged periods. Games that rely heavily on badges and points can lead to undesirable outcomes such as "loyalty backlash" or active disengagement when an employee realizes their behavior has been manipulated with no personal gain. Employees need to be constantly challenged to remain motivated. Introduction of enterprise gamification should be preceded by a clear long-term vision for employee engagement. This vision should be articulated clearly to ensure clarity of objective as well as drive participation from employees.

According to Gartner, by 2014, 80% of current gamified projects will fail due to poor design.

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What are the Key Success Factors for Enterprise Gamification?

Enterprise gamification plays a crucial role in helping address the firm's cultural and skill-based gaps for a successful digital transformation. Based on our experience, there are six distinct key success factors that determine the adoption/failure of gamified processes (see Figure 4).

Identify a clear goal

Gamification finds its application across multiple business areasengagement, compliance, and learning. However, organizations should ideally pick only one goal at a time in order to achieve best results. Picking multiple focus areas for application of gamification dilutes the goal of a gamified environment.

Define the user group upfront

Understanding the behavior of the people performing the task, their skill levels and abilities, their intrinsic and extrinsic motivators and their triggers will aid in choosing the right game mechanics and keeping the players engaged. For instance, motivation and rewards for a group of senior research scientists would typically be different from those of callcenter employees.

Set up internal capabilities for gamification

Gamification is more than just implementing a digital tool. It is a capability that requires significant investment in people (game designers, developers, and change managers), processes (methodology, performance) and technology (gaming platforms, analytics).¹⁸ Firms need to plan along these aspects and evaluate which capabilities need to be built in-house, which to partner for and identify people to champion the gamification initiative internally in order to effectively implement gamification.

Figure 4: Key Success Factors for Enterprise Gamification



Source: Capgemini Consulting Analysis

Continuously measure and adjust

Firms need to put in place the systems and processes to capture and accurately interpret gamification data. Measuring output from gamified applications is an ongoing effort and is needed to ensure continued relevance and to monitor and adjust gamification applications. Continuous measurement of results such as adoption rates, game abandonment stage, number of visits in a day, etc. provides insights into the efficacy of the gaming mechanics. This allows for real-time tweaking of gamification parameters (levels of complexity needed, collaboration, point systems, etc.) leading to higher success rates. This continuous measurement is also essential for periodic benchmarking against predefined performance parameters and for understanding ROI impact.

Proactively manage game completion

Each gamification initiative has its own shelf life but eventually engagement of the user group declines over time as "game fatigue" sets in. Good game mechanics design and continuous feedback help determine the optimal time for running the initiative. Subsequently, the completion should be managed proactively and quickly to prevent active disengagement or "loyalty backlash".

Adopt an iterative approach to gamification

Initial failures in gamification are OK and should be embraced as learning experiences. Gamification is a complex area which needs customized game mechanics based on the goal and the user group. It is usually not possible to achieve the desired results in a one-shot manner, but requires an approach of constant feedback, adjustment and learning. Development of a culture of testing and iterative learning is key to the creation of a digitally-enabled enterprise.

Enterprise gamification requires thorough planning, considerable investment and management commitment. By altering organization culture, gamification has the potential to change the overall employee experience. The scope of gamification, in an enterprise context, can indeed be vast – from recruitment right upto managing alumni networks. There are pitfalls to getting it right; however, the benefits clearly outweigh implementation challenges. We believe that gamification and digital transformation are a winning combination and firms cannot afford to ignore it.



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