Gamifying Business to Drive Employee Engagement and Performance

By adding game mechanics holistically to training and other business-critical processes, organizations can improve employee engagement, boost productivity and lift operational performance.
Executive Summary
Meredith wants to buy new shoes. She heads to the shoe section of a large retail store that has recently embarked on an omnichannel strategy. After shopping for an hour, Meredith zeroes in on a pair but realizes her size is not in stock. Despite being equipped with a tablet, the store associate fails to engage her, resulting in both a lost sale and a potential upsell opportunity if Meredith had been delighted with the online experience.

Such a lack of employee engagement with new systems can be costly when enterprises are undergoing a digital transformation, and the problem is not limited to retailers. Lack of employee engagement is a major cause of companies failing to bring about needed change. It is estimated that disengaged employees cost companies billions of dollars annually, and the opposite is equally true: Employee engagement is strongly related to key organizational outcomes.

Organizations across industries are turning to gamification to crack the employee engagement code. Gamification has been used by companies to engage their customers for some time now, using social media and mobile technologies to deliver contests, challenges and rewards. Now, however, enterprises are beginning to uncover the value that games can add inside the organization to drive business performance by motivating employees.

Growing seriousness about gamification marks a dramatic change in the way enterprises engage with their employees. At a time when the SMAC Stack™ (social, mobile, analytics and cloud technologies) is transforming the enterprise, gamification is emerging as the software component that binds employees, organizational values and objectives. Global researcher Markets and Markets predicts that gamification will be worth $5.5 billion by 2018, compared with its present size of $421 million.¹

The rise of gamification as an enabler of enterprise transformation can be attributed to the following drivers:

• Organizations looking to make the most of their business transformation efforts.
• The realization that gaming is an effective way to influence user behavior.
• The emergence of SMAC technologies that can improve engagement by allowing employees to more freely connect with one another, accelerating the transformation of organizational hierarchies into wirearchies.
• The rise of the millennial workforce, which desires greater engagement.

Gamification is much more than leader boards and badges and involves more than creating games with entertainment value. It means incorporating game elements into existing processes to boost productivity, improve skills and drive performance. As a result, it helps increase employee engagement.

Nevertheless, enterprises that embrace gamification will need to conduct thorough groundwork. For instance, top leadership will need to be involved with aligning the effort with the organization’s values and ensuring that the required technology backbone is in place. This should be followed by identification of processes that are ripe for gamification, such as training and education. The ideal gamification solution will target real-world business problems through integration with key systems and take a long-term view of the direction in which the organization intends to grow. Organizations should seek partners that are capable of providing an end-to-end solution.

Getting started with gamification is one thing; sustaining users’ interest levels is much tougher. There will be several challenges along the path of transforming employees from novices to masters. We believe the following steps and considerations are prerequisites for the successful gamification of work:

• Develop a clear view of where and what change in behavior and skills is desired.
• Ensure the effort reflects business goals and rewards activities that add value.
• Design the game so that it’s inherently social in nature.
• Make the game simple and easy to understand.
• On-board employees into the gamified process through easy-to-use instructional material.
• Target and leverage employees’ competitive nature.

Getting Serious about Gamifying Business
The digital transformation of business is rapidly accelerating. Technologies such as the SMAC Stack are dramatically altering how work is done. Organizations that have embraced these technologies
are experiencing greater flexibility in their day-to-day operations and working more collaboratively, both with customer-facing activities and internal processes. Nevertheless, while customer engagement has been redefined in the digital era, the same cannot be said about employee engagement.

Employee engagement is also key to another critical organizational component: change management. Indeed, 50% of the companies that fail to bring about a needed change do so because they are unable to convey the importance of the change to employees. This requires nudging employees out of their comfort zones and putting them in charge of the change with a sense of urgency, in a socially collaborative way.

Even as technology emerges to facilitate process change faster than ever before, transformation can be diluted if companies do not account for the people aspect. Employee engagement is strongly related to key organizational outcomes (see Figure 1), and it has become even more important following the 2007 global economic crisis, which spurred yet another wave of automation in industries such as retail, creating a need for employee retraining. In this scenario, training and education play an important role in maintaining a high level of employee engagement.

Yet, the numbers related to employee engagement in the U.S. are hardly encouraging. A survey by Gallup found that over 70% of American workers are either not engaged or are actively disengaged in their work. The report estimates that disengaged employees cost the U.S. economy $450 billion to $550 billion annually.

With its ability to motivate employees and measure performance, gamification can help organizations put employees at the forefront of change by inspiring them to embrace desired behavioral changes. Gartner, for instance, predicts that over 40% of the Global 1000 will use gamification by 2015 as the primary mechanism to achieve employee engagement for the transformation of business operations.

Several factors have emerged in enterprises to create a firm base for gamification. At the top of this list is the recognition that social technologies can create value within the organization, just as they have transformed personal lives and the way companies communicate with consumers. An increasing number of enterprises are investing in creating collaborative social environments for

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**Employee Engagement Has a Positive Impact on Key Performance Indicators**

Median differences between engaged and actively disengaged work teams studied by Gallup.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Engagement vs. Disengagement</th>
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<tbody>
<tr>
<td>Absenteeism</td>
<td>-37%</td>
</tr>
<tr>
<td>Turnover (in high-turnover orgs)</td>
<td>-25%</td>
</tr>
<tr>
<td>Turnover (in low-turnover orgs)</td>
<td>-65%</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>28%</td>
</tr>
<tr>
<td>Safety Incidents</td>
<td>-48%</td>
</tr>
<tr>
<td>Patient Safety Incidents</td>
<td>-41%</td>
</tr>
<tr>
<td>Quality (Defects)</td>
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</tr>
<tr>
<td>Customer</td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>10%</td>
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<td></td>
<td>21%</td>
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<td></td>
<td>22%</td>
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</tbody>
</table>

Figure 1
their employees. Elsewhere, the growth of smartphones has meant that more people — beyond millennials — have been introduced to gaming. Take Angry Birds — launched in 2009, it had over 263 million active users by December 2012. Add to this the similarities that games share with real-life work scenarios — just as games have levels, scores and points, a typical job will have targets, incentives and promotions — and gamification begins to seem inevitable.

Moreover, as the millennial generation prepares to enter the workforce, enterprises are incorporating personal technologies such as mobile phones and tablets into their corporate IT ecosystems and instituting bring your own device (BYOD) policies that encourage employees to use personal devices at work. (For more on this subject, read our paper Making BYOD Work for Your Organization.) As smartphones and tablets become the dominant devices in the workplace, gamification is emerging as the corresponding software component that binds employees, organizational values and objectives.

**SMAC and Gamification**

The SMAC Stack, or social, mobile, analytics and cloud technologies, is a disruptive set of technologies that is transforming the way companies innovate and evolve. This is as true on the customer-facing front as it is in employee engagement. Enterprises that are able to engage their employees with these technologies stand to make the most of the SMAC Stack.

Enterprises are banking on their social and mobile initiatives to increase collaboration among employees. However, just bringing SMAC technologies into an organization will not automatically result in a more collaborative, productive workforce. What you really want to change is employee behavior, which can be done using the gamification principles of “stimulus-action-reward.” Injecting gamification into the SMAC Stack will facilitate the behavior changes necessary for a successful transition.

Gamification can transform the way employees interact with their organizations. From making repetitive tasks interesting to helping employees improve their skill sets and generating continuous feedback on their performance, gamification has wide-ranging applications. Adding a fun element to employee training programs, for example, can improve outcomes, as well as attendance.

Gamification can start right at the onboarding stage, when new hires need to complete what may seem like mundane exercises such as filling out forms and learning about the company’s policies and values. From there, gamification can become an integral part of employees’ time at the company, enriching their experience at each stage of the employee lifecycle. Research has shown that employees trained on simulation games learn better and develop more skills, as these games engage trainees’ affective and cognitive processes (see Figure 2). Our own experience with gamification has been rewarding. Using game elements such as stories, challenges and freedom to fail, over 2,000 associates were certified on Cognizant’s corporate social media policy within 24 hours of the course being launched — an outcome that previously would have required more than a week.

Examples of companies using games for recruitment include the Marriott Group’s My Marriott Hotel Facebook game. Similar to a popular Facebook game called FarmVille, the game requires job aspirants to manage the hotel’s kitchen operations, earning or losing points based on customer satisfaction. This way, the company is able to attract and recruit talented employees.

**Simulation Games Result in Better Training Outcomes**

<table>
<thead>
<tr>
<th>(% increase)</th>
<th>Higher retention rate</th>
<th>Higher factual knowledge level</th>
<th>Higher skill-based knowledge level</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>11</td>
<td>14</td>
<td></td>
</tr>
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Figure 2
In heavily regulated industries such as banking, gamification and real-time data analytics can help make compliance training more entertaining, helping banks reduce their compliance risk and also providing them with compliance-tracking data that can be used by regulators. In combination with data analytics, gamification can help identify patterns in user behavior and refine the gaming experience by introducing elements that drive the desired change in behavior.

Similarly, gamification can also help improve the outcome of processes such as sales and customer service. By gamifying the collection of data needed for sales forecasting, for example, companies can improve the quality of data used for forecasting, thus leading to better budgeting. Similarly, customer service representatives inundated by support tickets could be motivated by linking incentives to issue resolution and positive customer feedback.

Gamification can encourage employees to collaborate through the company’s intranet-based social network with features such as missions, reward points and office productivity apps. Moreover, by making data on employee behavior and achievements available to all users, companies can help employees reach out to the right person within the organization to solve specific problems.

SAP’s SAP Community Network, for example, has helped boost employee intranet usage and identify technical experts and thought leaders who can be consulted for insights and advice. Similarly, the online music streaming company Spotify has replaced its annual review system with a mobile gamified solution that has garnered 90% employee participation, even though participation is voluntary. The approach involved combining quarterly targets with regular feedback compared with annual feedback.

Gamification can also be used to crowdsource ideas and innovation using social collaboration tools. For example, gamers were able to solve the structure of a retrovirus enzyme using an online social gaming tool called Foldit, created by computer scientists at the University of Washington Center for Game Science in collaboration with the biochemistry laboratory of David Baker. The challenge involved creating an accurate model of the enzyme; gamers were able to create remarkably accurate models that the scientists refined to create enzyme structures.

Embracing Gamification

While enterprise gamification is in a nascent state, its benefits are tangible, and organizations looking to gamify need to get the basics right. To begin with, organizations must take a long-term view of their gamification initiative, as the learning curve will vary depending on organization-specific variables, such as culture, employee demographics and level of technology integration.

It should be understood at the outset that gamification is not about making games; it is about integrating game elements into existing processes. This is trickier than it may at first seem, as it involves looking beyond badges and incentives and identifying the intrinsic motivations they wish to focus on. This involves understanding employees' behavioral patterns in relation to the processes they work on and creating a socially collaborative work environment. By identifying these patterns through behavioral analytics, companies can focus on gaps they need to fill, which in turn will guide the game elements that need to be introduced.

The next challenge is determining which processes to gamify. Not every process will fit the bill. Moreover, most workplaces will have some sort of incentive system already in place. The gamification of a process should consider the potential impact on existing incentives and rewards.

Getting the game design right is also important. A poorly planned or overly complex game design will put off users and could make it difficult for future efforts to blossom. Setting the right challenges, goals and objectives is crucial for a rugged game design. For all these reasons, game design is one of the most challenging and significant tasks in the gamification process.

At an organizational level, gamification needs to be integrated with the enterprise architecture. It is not a process that works in silos. Leaders need to set their expectations and put the right person in charge of the process, which would be someone with sensitivity to human behavior and experience relating the gamification process to the company’s values.
Unlocking Business Value
Employees who do not feel connected to their work and their workplace are unlikely to add value to the business. As U.S. demographics change, more millennials are joining baby boomers and Generation X in the workforce. Organizations will need to redefine their employee engagement approach to meet the different expectations of these generations. A one-size-fits-all approach is unlikely to succeed, and what works for one organization may not necessarily work for others. So an attempt to copy another company’s engagement strategy may not deliver success.

Embracing gamification will involve identifying what drives the different generations to bring their head and heart to work. Understanding employee behavior using analytics tools and creating an effective feedback and performance measurement mechanism will go a long way toward raising engagement levels. By introducing game elements into their processes, organizations can gather vital insights about employee behavior and create a virtuous loop of information that can drive their engagement strategy.

We believe the following are the prerequisites for effective gamification.

- **Gauging business value:** The key to successful gamification lies in identifying goals and metrics for the desired business outcome. Areas where key metrics need to be improved are best suited for gamification. Once an organization is able to do this, deriving business value becomes possible. In retail, for example, the identification process can begin with questions such as, “If warehouse throughput can be improved by 10%, what does that mean to the business?” The answer, of course, depends on the number of warehouses and how the business operates, but it should be possible to devise a reasonable estimate of return on investment (ROI).

- **Introducing game elements:** Gamification is all about understanding the end user and deploying game elements into the process in which they are involved. Asking certain basic questions related to the core aspects of gamification can guide organizations through the next crucial step of game design (see Figure 3, and the sidebar on page 7 for further insights on the gamification process).

  - **Setting and maintaining the momentum:** Gamification does not work in silos. For the best results, leaders need to embed the organization’s core objectives and values into the gamification effort. Rewards and HR programs will also need to be linked to the initiative so employees understand how their scores will impact their career progression. Once the foundation is in place, organizations need to continuously keep the gamified elements of the process fresh, challenging and rewarding. Because of the behavioral data that gamification provides, organizations can closely monitor employee engagement and take proactive measures as necessary (see Figure 4, page 8) reveals how a gamification program can be kept interesting, using challenges and training.

  - **Understanding behavior patterns:** Behavior patterns are linked to the metrics the organization seeks to measure. As shown in Figure 3, these have to be determined at the very beginning. Once the metrics are in place, challenges and incentives can be introduced to influence different types of behavior. The incentives need to be fine-tuned to produce optimum behavior change, and continuous monitoring of the metrics helps identify and deal with unintended consequences.

  - **Creating effective feedback loops:** Feedback loops not only keep gamification going; they also provide insights into employee behavior by generating data that can be refined with behavioral analytics. Feedback loops consist of three main elements:
    » **Motivation:** What is the motivation for a person to take the intended action?
    » **Action:** What is the intended behavior?
    » **Feedback:** What is the mechanism to provide feedback once the action has been performed? Will this feedback act as a motivator?
Playing the Retail Game

We recently worked with a large discount retailer to improve its check-out process through gamification. Among other issues and challenges, the retailer wanted to improve its speed of service at the point of sale. It had created new checkout processes to improve customer throughput and delivered game-based training directly to the point of sale to improve training efficiency and adoption.

The retailer established business goals it hoped to meet with the gamification approach, and we helped it improve the metrics it had identified to measure the progress of its six- to eight-week store production pilot. These metrics included items scanned per minute, average transaction time.

The game itself was geared around providing instantaneous feedback to players on their POS speed of service. It included reports and graphs for players to review their overall performance over time. Because the game relies on instantaneous feedback in order to be effective, the team developed a solution that provides a simple feedback mechanism to notify players on how well they are doing. This is accomplished by setting thresholds and comparing users with the speed of each transaction.

We also developed and deployed “Find That Item,” a graphical and interactive game-based learning (GBL) application that reinforces players’ knowledge of where items are located in the store. The game – intended to be played on the POS during slow periods – displays pictures of items, and the players need to identify the items’ location in the store. Scoring is based on the accuracy and speed of the answer.

The retailer has already seen results of its gamification initiative. Cashiers that were exposed to these games exhibited the intended behavior, and they cared about the feedback they received. Cashiers strived to get the highest score on every single transaction and monitored their overall scores during slow periods in the store. For the Find That Item game, cashiers sought a perfect score each time.

The gamification pilot resulted in a 10% to 50% improvement in cashier performance, saving an average of more than six seconds per transaction at the point of sale. If rolled out to the entire chain, this time savings will result in a $15 million labor cost reduction and redirection.
Creating an engaged workforce is a top priority for any enterprise. The current confluence of economic forces, demographic changes and technological evolution is now making it possible for organizations to truly engage their employees.

With gamification, the virtual world can help tackle real-world issues by making it possible to harness insights from the abundant data being generated in today’s digitally-enabled enterprises. To get there, and ensure that gamification initiatives do not falter, we recommend that enterprises consider the following:

- Focus on problems where key metrics can be measured and improved.
- Harness the potential to generate feedback by integrating relevant game mechanics into a process.
- Integrate gamification with the enterprise architecture and avoid working in a silo.
- Get the game design right; do not shy away from learning through trial and error.
- Create a clear path for employees to master the process.
- Understand employees and embed gamification into the core business systems that they use on a daily basis to enable immediate feedback and change behavior.
- Keep the gamified process fresh and rewarding.

Footnotes


About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world’s leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 164,300 employees as of June 30, 2013, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500, and is ranked among the top performing and fastest growing companies in the world.

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