the engagement economy:
how gamification is reshaping businesses

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> PHOTOGRAPHY BY MATT LENNERT
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Wayne Lin points at the onscreen scoreboard for his new application that allows friends to compare and discuss their household electricity use. “Energy consumption is not something people usually talk about,” he says.¹

But on this app people are talking—a lot. Users are leaving tips, providing support, sharing successes and having fun as they challenge each other to reduce their energy usage. One user jokingly laments that he has cut back on his television viewing to help his ranking and is now woefully unprepared to talk about the latest reality TV gossip. Conversations are cross posted on Facebook where people not directly using the application can jump into the discussion.²
Lin is the director of Product Management at Opower (pronounced Oh-Power), a company that has built a customer engagement platform to help deliver energy efficiency programs to the electric utility industry. Opower’s primary product to date has been home energy reports based on a number of behavioral science principles that resulted in energy savings of 2–4 percent. At scale, this has resulted in hundreds of millions of kilowatt hours saved.³

“Our goal is to foster an environment where people talk about their energy use in ways their friends can relate to. And through that, we encourage people to find ways to save electricity.”⁴ In this environment, real-world data combines with an ability to socialize and receive rewards for changing a behavior. Even Lin has evidenced real-world behavior change; in one post on the online scoreboard he jokes, “Maybe I’ll unplug my fridge ... I went up a bit this month to 163 kilowatt hours” (still an impressive figure given the average American household uses 958 kilowatt hours per month).⁵

Both school and work can be viewed as a sequence of challenges, quests and levels, with a badge awarded in the end in the form of a diploma, a job promotion to the next title, the status of valedictorian, or a year-end financial bonus.

Opower’s new product is more than an online report. It looks like a traditional web page, but it also feels a lot like a game. Users can complete challenges, participate in groups, and earn points and badges tied to real-world data. The goal is to keep users highly engaged, returning online to the app and participating, which then leads to real-world results.

The use of items like leaderboards, badges, missions and levels is part of a trend called gamification that can be seen in a growing variety of industries and applications. It’s a trend that analysts claim will be in 25 percent of redesigned business processes by 2015,⁶ will grow to more than a $2.8 billion business by 2016, and will have 70 percent of Global 2000 businesses managing at least one “gamified” application or system by 2014.⁷

Gamification is about taking the essence of games—fun, play, transparency, design and challenge—and applying it to real-world objectives rather than pure
entertainment. In a business setting, that means designing solutions for everything from office tasks and training to marketing or direct customer interaction by combining the thinking of a business manager with the creativity and tools of a game designer.

Opower is not alone in the attempt to improve energy efficiency with a new approach. “We’re all about the game mechanics,” says Yoav Lurie, CEO of Simple Energy, whose social game elements and data analytics combine with real-world prizes. Lurie’s company participated in an energy efficiency program piloted by San Diego Gas & Electric that succeeded in more than doubling energy savings among participating residential customers during a three-month period.

Of course, engaging customers and employees with game thinking and mechanics can extend far beyond looking at new ways to encourage energy efficiency. Industries and businesses of all types are seeing the benefit of applying these techniques. Content and media companies have seen online customer interactions increase 30–40 percent. Health care insurance providers such as Aetna and Kaiser Permanente are encouraging customers to engage in health care/wellness more regularly, with Aetna seeing increases of 50 percent in healthy actions. And restaurants using these strategies are seeing gains in both sales and server gratuities.

Admittedly, gamification sits at the top of a hype cycle, and many of these figures are pulled from the select few examples that have the data to prove that their intervention worked. But these initial adopters and results are enough to force leaders to pay attention and ask what’s going on.

BEYOND SCOUTS AND BADGES

Even before distinct phases of gamification began to emerge, gaming principles in businesses had been around for years. Frequent flyer programs offer elite status levels for miles, while other loyalty programs operate similarly, rewarding interaction with tangible benefits such as coupons or other perks. Both school and work can be viewed as a sequence of challenges, quests and levels, with a badge awarded in the end in the form of a diploma, a job promotion to the next title, the status of valedictorian, or a year-end financial bonus. Even the Boy Scouts and Girl Scouts of America provide badges to children for demonstrating skills and completing projects.

A convergence of technology

While frequent flyer programs and the Scouts demonstrate some ele-
lements of gamification such as rewards, levels, badges and challenges, they lack elements that could create a much more engaging experience. These elements include leveraging technologies like real-time data analytics, mobility, cloud services and social media platforms to accelerate and improve the outcomes of the initiatives.

Other nontechnological trends that are driving both the interest and potential for gamification include an increasing recognition that games are one of the most predominant and influential communications and entertainment mediums on the planet, broader understanding of behavioral science principles, and finally, a renewed focus by businesses to place the customer at the center of information technology strategy.

**Figure 1. The elements and tools of gamification**

As a game designer uses different strategies and tools to create a new game, so must leaders and managers use a toolkit to facilitate their process of gamification. Hundreds of separate game mechanics principles, behavioral economic theories, and current user experience design thinking can be distilled into four overarching elements, as noted below.

1. **Progress paths**: the use of challenges and evolving narratives to increase task completion. In games, the next desired action is usually clear. This clarity around objectives is usually not as explicit in real-world scenarios but is added when attaching progress paths to your processes and systems. The complexity of challenges in progress paths also increases over time. Where a novice is rewarded for more basic tasks, a more advanced
user requires a challenge of greater difficulty to remain engaged with the system.

2. Feedback and reward: the use of rapid indications of success through virtual and monetary rewards. Games do not wait to reward you: buildings collapse and make noise, scores increase instantly, and virtual money may even change hands. In real-world scenarios, however, an individual’s action may go totally unnoticed or unrewarded. Adding hyperfeedback to a process can provide the right reward at the right time. Designing the right reward, then, becomes the second part of the design challenge. Some users will be motivated by more traditional monetary-based rewards, while others will be rewarded differently, by increasing their ability to explore and master a system, for example, or to have some level of power, leadership or responsibility.

3. Social connection: leveraging social networks to create competition and provide support. Games have often provided reasons for friends to gather. With the Internet, social networks and now the ability to be social over mobile devices, processes and systems can provide instant access to friends and social connections at any time. This enhances the ability to have conversations and dialogs with other users that increase the level of interaction and engagement.

4. Interface and user experience: aesthetic design and cross-platform integration considerations to enhance fun. Due to improvements in video game graphics and Web page design, many users are increasingly sophisticated when it comes to expectations for technology services. This presents a challenge for businesses with limited design staff. It also presents an opportunity for organizations that are able to either rapidly increase their design competency or network with firms who can fulfill that roll.

The power of these four elements comes from a designer’s and business’s ability to blend them. No one game mechanic should ever be considered in isolation. Doing so could result in an intervention that achieves no result at all, or worse, actually has a reverse or negative affect on outcomes.

Gamification’s past, present and future

Although the use of game design in business contexts is a relatively new notion, we are already witnessing a progression of realization and application across three distinct phases.
The power of games: The first phase for business was a simple realization: Games are powerful. Lots of people play them, and they play them with high levels of engagement. Because of the commercial success of entertainment games, practitioners in nonentertainment fields saw the potential for application. Often called the “serious games movement,” organizations looked at an existing problem or process and attempted to turn it into a game. While this practice is still in place, especially in educational training environments, there are two primary downsides. First, users are only engaged during the period of game play versus persistent real world behavior. Second, there can be relatively high development costs associated with these types of games.

Example: Microtask’s Digitalkoot used the narrative of a mole crossing a bridge to complete almost 2.5 million word recognition tasks in an effort to digitize Finland’s National Library. The original objective was to leverage the power of crowds; the game layer was added to provide an additional level of engagement.17

A badge is simply a seal similar to what military personnel receive for accomplishing objectives or receiving a promotion. “The key ... is to tie it to a real accomplishment, and then it has significant meaning and purpose.”

Single, non-game processes: The second phase for business is more recent. It is centered on the realization that the core design principles and mechanics of traditional games could be applied to problems, processes or information technology systems—in other words, non-game contexts. This is where many gamification implementations are occurring today. For example, marketing teams use it as a means to attract and retain customers. But organizations are also looking to upgrade community websites, major enterprise software and other systems to include audience engagement elements. A major benefit of this phase is the ability to track and share data, but there is still a downside: Many implementations are contained within just one problem, process or system.
Example: Samsung Electronics created the Web page Samsung Nation as a place for Samsung enthusiasts to look at new products, provide reviews, socialize, troubleshoot and more. As Samsung Nation members complete these various activities they earn points, unlock badges and can be featured on a leaderboard. Customer-facing brands like Samsung have seen increases in time spent on site, user generated content and shopping cart clicks.18

Global behavioral data integration: A third phase for business is just beginning and is expected to become more prevalent. This phase centers on the notion that, as more platforms track behavioral data, the aggregate of data could provide insight to the business. This is a phase where many, if not all, enterprise systems of record “talk” to each other about a user’s behavior throughout the system. At an even more advanced level, these data could be linked with third-party data providers, open data sources and paid data sources. The caveat is that it may require organizations to develop and agree to terms on standards for sharing data, while maintaining strict data privacy and security standards.

Example: Jive, an enterprise social business software company, has announced the launch of the Jive Social Intranet Solution. The solution combines social features and gamification features, such as missions and real-time feedback and rewards, and integration with productivity applications and traditional intranet capabilities. Specific elements of integration include Microsoft Outlook, Office, SharePoint, mobile access, and privacy features. This system will allow for the tracking of more than 100 employee actions including creating new documents and providing helpful responses to discussion questions.19

Regardless of where you start, the core meaning behind gamification remains constant. Gamification is a process that applies the thinking and tools of a game designer, such as mechanics, to an existing real business problem or process.

NOT A TRIVIAL PURSUIT—REAL RESULTS AND REAL MONEY

In the summer of 2011, Facebook announced it would use the social performance platform Rypple (now part of Salesforce.com) for internal reviews and communications.20 Rypple allows employees to create and compete in challenges, receive recognition from colleagues, see what others are working on, and find where needed skills may exist within an organization. But Rypple is not a game. It doesn’t even look like a game. It was designed, however, with several game design principles in mind.

“We wanted to provide a platform that emphasized intrinsic motivation,” says Nick Stein, director of Content and Media at Rypple. Rypple users can award badges to other users in a show of thanks for a job well done or for completing a task. A badge is simply a seal similar to what military personnel
receive for accomplishing objectives or receiving a promotion. “The key … is to tie it to a real accomplishment, and then it has significant meaning and purpose.”

Stein’s portrayal represents a modern perspective on gamification: that it can enhance an existing business process, system or customer experience—in this case, employee performance management. This type of improvement of a business’s internal process systems and procedures (training, innovation management and more) has been called gamification of the enterprise and is emerging in organizations large and small. Software maker SAP has taken up numerous game-like initiatives in critical business functions such as accounts payable; Cisco used gaming strategies to enhance its virtual global sales meeting; and call center company LiveOps used extremely timely performance feedback as part of a larger gamification initiative that allowed some agents to reduce call time by 15 percent, and improve sales by between 8 percent and 12 percent.

In addition to use in the enterprise, there is a growing list of marketplace examples where gaming design, principles or mechanics are used for organizations both large and small.

Double viewer engagement: In the world of media and entertainment, a major cable network found it could double the engagement on a show website by incorporating game mechanics such as challenges and leaderboards to encourage fans to interact with the site. During a presentation at the 2011 Gamification Summit, a network executive revealed that the program generated a 130 percent increase in page views for the network’s show and a 40 percent increase in return visits.

Increase restaurant sales: In 2010, a Colorado restaurant implemented a gamification-based employee program with the goal of motivating waiters and waitresses to increase sales of specific menu items. Participating staff were awarded chances to play online “random-point-yielding games when they sold a fresh-squeezed orange juice or a 4-pack of cinnamon rolls.” Points were redeemable by staff for a branded debit card. One case study estimated that the [restaurant] realized an ROI of 66.2 percent due to an increase in sales of the targeted menu items.

Improve health: Health care has also gravitated toward the use of gamification principles, with many efforts centered on personal wellness. Aetna recently adopted Mindbloom’s Life Game platform to help customers and employees adopt healthy life habits. Members using the site visit nearly four times per week with
an average engagement time of 14 minutes, 41 seconds per visit. “A significant amount of total health care costs stems from lifestyle choices such as lack of exercise, failing to eat properly and smoking,” said Dan Brostek, head of member and consumer engagement at Aetna.28 “Mindbloom can help users manage specific physical conditions and can also help them monitor areas often correlated to health outcomes, but considered ‘unmentionables’ in the current health care system such as stress related to jobs or caregiving, relationship conflicts, unhealthy sex life or financial issues.”29

Concerns over gamification come from a variety of disciplines. For example, managers fear a distracted workforce doing nothing more than playing games, but these managers may be unfamiliar with the modern behavioral techniques embedded within existing technology, systems and processes.

Slapdash implementation reduces potential results, but you might get lucky

“I’m often asked about the worst examples of gamification,” says Gabe Zichermann, CEO of the media company gamification.co and co-chair of the Gamification Summit. “But even when companies add badges in what some might call a slapdash kind of way, they’re still seeing some results in user engagement. That’s what’s remarkable about gamification. Businesses add it hoping to ‘move the needle’ 1 percent, and they end up [improving] by 50 percent.”30

Zichermann’s note of optimism threaded with caution may be prudent given the hype surrounding gamification. It is natural to question whether gamification is just a rehashing of old ideas or if there is real value in applying these science-based tactics in new ways to business problems.

THE CRITICS: DON’T GET CAUGHT “SHAVING THE YAK”

“… And of course we’ll use gamification to incentivize people,” states a professor of civil and environmental engineering from one of the United States’ leading
universities. The professor has just finished proposing a hypothetical solution to an urban transportation system.

A cross between a groan and a laugh emerges from the side of the room: Adam Greenfield does not like gamification. He’s not alone in his concern. Critics cite manipulation, fake fun, cheating, bad design, useless frivolity and other issues that should be considered by those thinking about gamification’s potential.

Greenfield, a regular speaker and consultant in user experience, brings an interesting perspective to the critique of gamification. His career is an intersection of the understanding of technology, human behavior and design elements that some believe are necessary before beginning any behavioral analytic program.

“Gamification is not a substitute for good management,” he says. Many of the practices discussed earlier, from having clear goals, objectives and challenges to making sure you reward positive outcomes as quickly as possible, are known to managers everywhere. Yet managers sometimes fail to take these steps, and there is a risk that gamification simply becomes a stopgap measure for poor management rather than [an] accelerator of business.

“We have to avoid situations where we’re just ‘shaving a yak’—keeping busy to avoid real work and real outcomes,” Greenfield says. Strategies may keep people engaged and busy completing tasks online or elsewhere, but businesses should monitor programs carefully to determine whether actions are truly tied to desired results.

Concerns over gamification come from a variety of disciplines. For example, managers fear a distracted workforce doing nothing more than playing games, but these managers may be unfamiliar with the modern behavioral techniques embedded within existing technology, systems and processes. Other risks associated with gamification, and possible solutions, include:

- **Belief that gamification is solely the realm of gamers:** This is largely an issue of awareness and education. It’s about understanding that new ways to elicit feedback, pose challenges and drive experiences can increase engagement and deliver improved business results.

- **Tying extrinsic rewards to artificial achievement:** Participants may work to achieve a reward solely for the sake of getting that reward. While this approach can work in the short run, it is generally not sustainable and should be addressed in your overall strategy. Instead, provide systems of challenges and rewards that can be more meaningful to participants and allow them the freedom to be creative. As author and
speaker Dan Pink has said, “Management is great if you want compliance, self-direction is better if you want engagement.”

- **Cheating:** Any effort that has applied a gamification strategy will be susceptible to cheating. During the design process, businesses should attempt to think like a player who would do anything to win—in other words, try to game their own game. If the implementation is abused in a way not intended, have a process in place to rapidly identify and remediate. One reason games are powerful is because the implicit rules are clear. Without a set of guiding rules and dynamics, cheating and dissatisfaction may increase.

- **Using game mechanics to bolster a flawed product or process:** Gamification will not fix something that’s already broken. For example, customers will not engage more deeply with a food brand that has bad tasting products just because they can earn points.

- **Using just one game element:** Gamification is a design process that includes hundreds of considerations, mechanics and theories. Relying on a single element may leave your efforts lacking.

- **Creating systems of dependency or fatigue:** As the prevalence of gamification increases, there is both the risk of users demanding it in all interactions, as well as users seeing it so often they get bored. While the latter can be resolved with a good strategy of innovation and iteration, the former presents a problem if organizations implement a gamification pilot and later remove it (in a small experiment to study the effect of taking game features out of a network, IBM found a 50 percent decrease in user actions).

**TURNING A SYSTEM OF RECORD INTO A SYSTEM OF ENGAGEMENT**

James Gardner is a managing partner at an innovation software company and has applied game mechanics across financial institutions, government agencies and more. In his previous role as chief technology officer of the United Kingdom’s Department of Work and Pensions, Gardner led an effort to increase employees’ and the public’s engagement with innovation and government improvement.

“We saw the engagement of employees and the number of new ideas generated dramatically increase when users were on the system more than three times per week,” Gardner said. Ideas submitted there not only earned users points but also reputation on selected topics. Department employees were encouraged to
comment on ideas to shepherd them through the review and prototype processes, and the better your reviews and actions were perceived by others, the more your rank and status rose in the social community.

“The notion of reputation is critical in any system involving discretionary time contribution, especially with citizens and employees. Without it, people can submit ideas of no merit and receive credit,” Gardner continued. “We had an instance where the idea to put a senior government official in a bath of custard nearly won an entire contest. In that instance there was no reputation system of checks and balances to catch a rubbish idea early and vote it down. This allowed the idea to catch on virally, and people without reputation joined into the voting and contributed weight to the outcome despite not providing any previous benefit in the system.”

Gardner’s story suggests two example characteristics of a leader’s approach to gamification:

1. **Leaders know the data.** Gardner looked at what data indicated a level of engagement that can result in a measured business result. Once a critical inflection point is identified in the data, progress paths and feedback can be designed in an attempt to achieve a threshold that will improve both overall system performance as well as user experience. In Gardner’s case, this entailed getting users to engage more than three times a week.

2. **Leaders identify critical implementation components.** Based on experience and results in their organization and beyond, leaders can identify the variables and questions that are critical to effectiveness of their system or implementation. In Gardner’s case, adding reputation systems improved results.

Leaders we’ve encountered when talking to organizations who have implemented what is now called gamification frequently state: “We didn’t set out to make a game,” or “gamification wasn’t even a word on our radar.” Instead these business leaders phrased things in terms of what behaviors they wanted to see increase in their customers or employees. These behaviors, they thought, would lead to desired business outcomes and objectives. Organizations with this practical approach to business results are looking for solutions that have the potential to drive real results regardless of what new name it is called, but they need to understand what to think about before trying it out.
GETTING STARTED

The first considerations for getting started are similar to many business improvement initiatives: What are your goals? Why are you doing this? Who is your audience? Thorough consideration can provide insight to where gamification may be most helpful as well as clarity around the full nature of the problem. Some questions to consider before you start:

First things first

What are you trying to accomplish? Clearly articulate the problem that gamification is trying to address. Determine if gamification is something that can contribute to core processes or strategy or if it simply will supplement existing plans. See if others in similar organizations have tried games before, and if so, what worked and what didn't.

Gamification can provide a reason for a customer to visit a website or a store more often. It could give employees a new way to obtain the feedback they desire on job performance. It could connect customers in a way that makes them feel rewarded and respected for their opinions and support of your business or product.

Who is the audience? Consider things that will motivate customers and employees such as collecting, creating order out of chaos, triumph over conflict and even fear. You may also consider what scientist Richard Bartle called player types. His research showed different types of players that emerge in gaming environments, including socializers, achievers, explorers and killers (those motivated by the defeat of others rather than their own success). Social desires are very prevalent in the general user population, if not more prevalent than those motivated by personal achievement and reward.
Designing your solution

How does your design maintain authenticity? Don’t turn real-world tasks into frivolous activities; a system can still be beautiful and metaphorical while maintaining clarity about the benefits it provides to users or users provide to other participants. In addition, provide a win condition for all players. No one wants to perpetually be at the bottom of a scoreboard; demonstrate progress toward mastery for your users. The goal is not to “game” or manipulate your target audiences, but rather to mesh behavioral science with social technologies to increase the interaction and engagement with audiences.

Who should help? Design teams need to be able to address the overall organizational goals, measurement and analytics needs, design of incentives, and information technology considerations. Your effort could benefit from a multidisciplinary team that includes business-line strategists and managers, along with social scientists, marketers, game designers, programmers and those with data analytics expertise.

How do I track the behavioral data? Technology providers offering gamification platforms or solutions typically make the tracking and feedback of behavior easy. But you don’t have to use vendors. You can track behavior without custom technology through manual processes if you have the resources; just consider if you are still able to provide rapid feedback. If you decide to leverage a vendor, first ask about previous results, and try to evaluate their ability to scale.

Measuring results and improving process

How will you track effectiveness? It’s not enough to just capture data; you need to be prepared for meaningful analysis of the results. Return on investment assumptions should be thought of beyond simple project dollars spent. Develop formulas to measure the long-term value of more engaged or loyal customers or employees. The relationship of engagement to loyalty and ultimate profit (or improved performance) may be a cause-and-effect sequence.

What is your plan for updating and creating new content? An important lesson from the gaming industry is that once a game is released, the work is not done. Because data are continuously gathered, the organization can learn and adapt as needed. Furthermore, users may eventually tire of a system or run out of tasks or challenges to complete. Frequent addition of new content may keep users engaged for a longer period of time. Piloting applications can be a
low-cost and low-risk method to begin to understand how to use gamification to encourage engagement and change behaviors. From there, leaders can scale initiatives into new business areas or make existing initiatives larger in scope.

**IT’S TIME TO PLAY**

Businesses should start thinking differently about how to engage customers and employees. Gamification can provide a reason for a customer to visit a website or a store more often. It could give employees a new way to obtain the feedback they desire on job performance. It could connect customers in a way that makes them feel rewarded and respected for their opinions and support of your business or product.

In today’s engagement economy, where time and attention are becoming increasingly scarce and resources precious, people are likely to gravitate to activities that are authentically rewarding and filled with the opportunities to achieve, grow and socialize. The lessons that can be learned from games and game designers are one set of tools to help us increase our return in such an economy.

If you’re ready to play: game on. **DR**

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Endnotes

2. Wayne Lin, e-mail correspondence with author, April 20, 2012.
4. Ibid.
23. <http://www.arn.com/2011/01/01/a_glimpse_behind_the_curtain_with_ciscos_game_the_hunt/>
29. Ibid.
34. James Gardner, conversation with author, September 16, 2011.
35. <http://www.mud.co.uk/richard/bcids.htm>