Gamification 101:
An Introduction to Game Dynamics
Introduction

Gamification—the application of game mechanics into non-game activities and processes—is a proven, powerful strategy for engaging, influencing and motivating diverse groups of people. The business community has just begun to realize the power of gamification to enhance customer interaction, build loyalty, and incentivize employees and partners. And the concept has the potential to solve a variety of obstacles outside the traditional business environment as well, in areas such as Health & Wellness, Education & Training and Public Policy & Government.

Understanding how and why gamification works, and in what contexts it is most effective is essential. This report will provide a definition, basic foundation and value proposition for gamification in the following sections:

I. Introduction: Gamification Defined

II. The Building Blocks of Gamification

III. The Business Value of Gamification

IV. Gamification: Use Cases

V. Key Questions and Best Practices of Gamification

Gamification Defined

At its core, gamification applies game mechanics to non-game activities to prompt specific behaviors. In a business context, gamification is the process of integrating game mechanics and dynamics into a website, business service, online community, content portal, marketing campaign or even internal business processes, in order to drive participation and engagement by target audiences.

The overall goal of gamification is to more deeply engage with consumers, employees, partners and other audiences, and inspire them to participate, collaborate, share and interact in some activity or community. A particularly compelling, dynamic, and sustained gamification experience can be used to accomplish a variety of mission-critical business goals.
Game Mechanics & Game Dynamics

Game mechanics are the basic actions, processes, and control mechanisms that are used to “gamify” an activity. They are the rules and rewards that make up game play and create a compelling, engaging user experience. Game mechanics make the activity challenging, fun, satisfying, or whatever other emotion the game’s designers hope to evoke. These emotions, in turn, are the compelling desires and motivations of the experience we call game dynamics.

Game mechanics include:

• Points
• Challenges
• Leaderboards

Game dynamics include:

• Levels
• Virtual goods and spaces
• Gifts and charity

• Rewards
• Achievement
• Competition

• Status
• Self-expression
• Altruism
Games Are Everywhere

Competition and game playing is deeply ingrained in the human psyche. In the modern era, gaming has become a hugely popular and tremendously profitable industry on the order of $60 billion per year. Given this wide acceptance of gaming and the simultaneous emergence of the Internet, people have accepted game mechanics in every aspect of their lives. As a result, “gamification” is becoming a powerful tool through which organizations teach, persuade, engage and motivate people. Consider the following examples:

Frequent Flyer Programs

120 million people around the world are accruing points, leveling up, and earning rewards in the Frequent Flyer Programs (FFPs) offered by nearly every major airline. FFPs are actually complex games, with customers earning miles (points) for every segment flown, moving from Bronze to Silver and Gold status (leveling up), and even completing challenges like “Fly in the next 90 days for 2500 bonus miles.” And they’ll go out of their way to stick with the vendor where they have the most points and status — even when disappointed with the actual service.

Starbucks

The world’s biggest coffee chain is rewarding users with virtual points and virtual badges for visiting their retail stores. Starbucks enables their customers to “check-in” at their retail locations on their mobile phones. When they complete quests, like “visit five different Starbucks,” they earn points. The points have no monetary value, and the badges don’t have any real-world payoff. However, Starbucks provides a fun tool to get people to visit their stores and buy more product.

Nike+ and the iPod

The world’s largest athletic footwear manufacturer has “gamified” exercise. Over 1.8 million runners use Nike+ to capture data such as distance, pace, and calories burned using a GPS sensor connected to their iPods. The Nike software rewards users when they reach a milestone. After workouts, runners go online to upload data, track statistics, set goals, join challenges, and connect with fellow runners in the Nike community and other social networks. Nike+ has allowed the company to build a huge and active fan base.
The Building Blocks of Gamification

Gamification drives participation and engagement by integrating game mechanics and game dynamics into a website, service, online community, content portal, marketing campaign or even internal business workflows. Gamification influences behavior through the use of key concepts from a number of related areas, including game design, customer loyalty programs, behavioral economics, and community management.

Game Mechanics Motivate Behaviors

The addition of game mechanics to a site or application allows you to layer more compelling user experiences into existing activities. These gamified activities address and satisfy basic human desires, creating the addictive experiences that motivate users to take specific actions, and to return more frequently.

Game mechanics are tools and techniques that act as building blocks for gamifying a website, process or application. Used individually or together, they create a highly motivational user experience around existing website functionality or content. Some of the most common game mechanics include the following:

1. Points
People love to earn and achieve points, making them incredible motivators. Points can be used to reward users across multiple dimensions, and different categories of points can be used to drive specific behaviors. Points can be used as status indicators, users can spend them to unlock access to content, or spend them on awards. Studies done at IBM Research and the University of Chicago have illustrated dramatic effects that earning points can have on user behavior, even when they have no monetary value. People simply want to be rewarded and feel like they’ve gained something.
2. Levels
Levels are different classes in frequent-flyer programs, colored belts in martial arts, job titles in industry: an indication that you’ve reached a milestone, a level of accomplishment in a community, and should be afforded a certain amount of respect and status. Levels are often defined as point thresholds, so that users can automatically level up based on participation or usage to indicate status.

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<th>Game Mechanics</th>
<th>Human Desires</th>
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<td>Reward</td>
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<td>Virtual Goods</td>
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<td>Leaderboards</td>
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<td>Gifting &amp; Charity</td>
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The chart above illustrates the interaction between basic human desires and game play. The green dots signify the primary desire a particular game mechanic fulfills, and the blue dots show the additional areas that it affects.

3. Challenges, Trophies, Badges, Achievements
Challenges provide people with missions to accomplish and then reward them for doing so. Challenges give people goals and the feeling they’re working toward something. The general approach is to configure challenges based on actions that you’re tracking, and reward users for reaching milestones.

Trophies, badges, ribbons, etc. are the visible recognition of having reached new levels or completed challenges. One of the keys to making levels and challenges effective is providing a forum for users to show off their achievements, like a trophy case or user profile page that displays earned badges. Counterparts in the real world include Scouting merit badges, colored credit cards that indicate high spending limits, or gold frequent flyer cards that indicate member status.
4. Virtual Goods
For a game economy to be effective, it must have a place to spend points, provide an incentive to earn more, and offer the ability to customize something that reflects personal identity. Virtual goods help to achieve this and are a great vector for creativity, competition, and self-expression in the community.

Virtual goods are non-physical, intangible objects that are purchased for use in online communities or online games. Users purchase virtual goods like clothing, weapons, or decorations to create an identity for their virtual self while comparing and “showing off” with their friends.

5. Leaderboards
Most successful games have a “high-score table” to provide inspiration and also indicate how each user is progressing against competitors. In the context of gamification, leaderboards are used to track and display desired actions, using competition to drive valuable behavior.

6. Competitions
Competitions enable your players to challenge each other for the high score at some activity. Once everyone has completed the activity, the user with the highest score wins a reward while the losers get consolation prizes. This is effective in extending one-player games and other single user experiences for multi-player use. For example: “I just scored 500,000 points at Asteroids; beat that!”

Game Dynamics Satisfy Desires
People have fundamental desires for reward, status, achievement, self-expression, competition, and altruism, among others. These desires are universal, and cross generations, demographics, cultures, and genders. Game designers have known for years how to address these needs within gaming environments, and gamification now enables these precepts to be applied more broadly. By wrapping the appropriate set of game mechanics around your website, application, or community, you can create an experience that drives behavior by satisfying one or more of the following human desires:

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<tr>
<th>Status</th>
<th>Reward</th>
<th>Competitive Nature</th>
<th>Altruism</th>
<th>Self Expression</th>
<th>Achievement</th>
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**Game Dynamics**
Reward
Human beings are motivated by receiving rewards — something of value given for some kind of action. A reward is presented after the occurrence of an action or behavior with the intent to cause that behavior to occur again. With gamification, the primary reward mechanism is through earning points or the equivalent. Obtaining virtual goods, leveling up, and even completing achievements also satisfy this desire.

Status
Most humans have a need for status, recognition, fame, prestige, attention and the respect of others. All elements of game mechanics drive these dynamics, with leveling-up being a primary motivator.

Achievement
Many people are motivated by a need to achieve, to accomplish something difficult through prolonged and repeated efforts, to work towards goals, and to win. People motivated by achievement tend to seek out challenges and set moderately difficult (but achievable) goals. Their most satisfying reward is the recognition of their achievements.

Self-expression
People often seek out opportunities to express their autonomy and originality, to mark themselves as unique. This ties into the human desire to show off a sense of style, identity, and personality and to create group affiliation. Virtual goods allow players to create their own identity, whether earned through rewards, received as gifts, or purchased directly. An individual’s avatar can act as a rich focal point for expression.

Competition
Individuals are frequently 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. We gain satisfaction by comparing our performance to that of others. All elements of game mechanics tap into this desire, but the use of leaderboards is central to display competitive results and celebrate winners. Most games provide at least a top ten list, and using that public display to indicate new levels achieved, rewards earned, or challenges met can be a great motivator to all players.

Altruism
Gift-giving is a strong motivator in a community where people seek to foster relationships. Not all gifts are equal, so motivated gifters will seek out more valuable forms of expression, either through money or through time spent earning or creating the gift. In gamification, gifting is a powerful acquisition and retention tool. Receiving a gift from someone pulls you into the game, and incentivizes you to send gifts to your friends, creating an acquisition loop. Each time you receive a gift, you are pulled back into the application to redeem it, serving as a powerful retention vehicle.
The Business Value of Gamification

Engagement builds lasting relationships, impacts fundamental business objectives and drives business value. When people participate and engage, they learn about your business, your products, your services and they keep your brand top of mind. They introduce your business to friends, family and peers. They become customers and they remain customers. These people become the backbone of your business—repeat purchasers that act like a billboard for your brand. Gamification can drive participation and engagement of every kind, including:

- Watching videos
- Listening to audio
- Viewing photos
- Opting in to email communication
- Creating content
- Answering questions
- Making a purchase
- Taking quizzes
- Searching for information
- Sharing personal info
- Rating products
- Reading articles
- Voting on content
- Filling out registration data
- Writing comments
- Participating in discussions
- Posting to forums
- Taking a poll
- Visiting repeatedly
- Visiting affiliated sites
- Recommending affiliated sites

Tracking and Statistics Drive Participation

At its core, gamification is all about statistics. By capturing statistics, communicating standings, and rewarding accomplishments, we create a method to drive continuous and extended participation. Even though individual games (or other activities) may have lost their initial excitement, each episode becomes an entry into a larger game that creates a desire to make return visits in order to reach new goals.

If two people play Monopoly every day for a week, it quickly grows boring. But if they start capturing and displaying statistics — how many times each person won, how many dollars each winner had, which properties were most profitable — then the experience becomes more interesting. Statistics create another level to the game and motivate people to play more.
The Audience for Gamification

Gamification is a strategy for influencing and motivating the behavior of people – any people, whether they are customers, employees, partners, students, fans, constituents, patients, and so on. Because it targets key human traits and desires, the audience for gamification is virtually anyone you want to engage repeatedly in order to elicit a particular behavior. The potential uses of gamification run deep and wide across a multitude of industries, companies, divisions within those companies, and individuals inside those divisions. The chart below just begins to touch on the many diverse ways gamification can be used.

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<td>Training and Education</td>
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Wherever there are people, there are people to be motivated. Gamification can be applied across a broad spectrum of situations where individuals need to be motivated or incentivized to pursue specific actions or activities.

- Salespeople and channel partners can be incentivized to grow revenues and focus on desired product mixes via competition and challenges.
- Call centers and customer support organizations can be motivated to deliver superior customer service through a customer feedback mechanism or other metrics.
- Employees can be motivated to pursue optional training initiatives that enhance their careers and make them more valuable to the company.
- Patients and health insurance customers can be incented to adopt and maintain healthy lifestyle choices that extend their lives and reduce healthcare costs.

“Companies of all shapes and sizes have begun to use games to revolutionize the way they interact with customers and employees, becoming more competitive and more profitable as a result.”

“Changing the Game”
David Edery, Ethan Mollick
Business Use Cases of Gamification

A key goal of business is to attract and engage a group of people with a common passion or interest, and then “activate” them to purchase. Many marketers are looking to leverage online social networking for this purpose, but the results have been mixed. Adam Sarner, a Gartner analyst, has projected that over 75 percent of Fortune 1000 companies will undertake some kind of online social-networking initiative for marketing or customer relations purposes by 2014.

Through gamification, organizations can take control of their brand experience by engaging users, encouraging them to join a community, drive active participation, share with friends outside the community, and even recruit friends. Gamification enables you to turn customers into fans, and fans into evangelists.

Example: HopeLab

HopeLab is an innovative organization whose mission is to drive healthy behavior in young people. Fighting chronic illnesses like cancer, obesity, and depression, HopeLab uses games and connected devices to create the most effective motivational methods.

For example, the Zamzee device is worn on a belt or carried in a pocket, and it monitors physical activity throughout the day. Plugging it into a computer, this data is converted to points that can be redeemed for virtual goods and real-world rewards. A pilot study showed that kids using the Zamzee device and website were about 30% more active than those who did not.

Example: Global Technology Company

A leading computer manufacturer recently launched a Facebook campaign to build a community of tech-focused college students, with the goal of promoting their educational computing site and selling more student laptops. To drive growth, they created a gamified Facebook application that offered students a chance to win a $5,000 scholarship and a free PC. To win, students had to earn points for doing things like registering for the contest, inviting a friend to join, creating a team, registering on the company’s educational computing site, and posting contest messages and awards on their Facebook wall.

Six weeks after the launch of the gamified application, they had increased program participation by 1,000%. Other success metrics from the campaign:

1 in 3 checked out the student laptop reviews
1 in 3 promoted the Facebook application
1 in 3 posted their award and new level
1 in 3 visited the educational computing site
1 in 4 recruited friends to help them
1 in 5 made the laptop their Facebook profile picture for a day
1 in 6 participants wrote and submitted an essay
Loyalty has evolved beyond traditional, redemption-focused point programs that offered gifts or discounts in return for purchases. Today’s savvy marketers realize they must differentiate themselves from this foundational model, primarily because the rewards given by most loyalty programs are inadequate in the Internet Age. Using gamification, loyalty programs can significantly increase their effectiveness by adding more intrinsic motivators to the “earn” aspect of the loyalty experience.

Fun, compelling and addictive game play generates excitement that adds to the player’s experience, whether the competition is solitary or involves others. An effective loyalty program views the entire “earn” experience as a game, one wherein the “play” is just as fun as the “winning.” Adding leaderboards and tiered-achievement levels will enhance the gaming aspects because people desire the challenge of working for a reward. The right level of challenge arouses and excites the brain. Setting and hitting milestones results in a repeated sense of accomplishment and boosts self-worth, leading to the ultimate satisfaction of reaching the goal and “winning the game.”

**Example: Global Consumer Product**

A European company opted to shift their marketing strategy for one of their top Personal Care products to a “high engagement, online ecosystem” model. The resulting program was a social networking application that connected participants across the web. The goal for participants was to earn rewards by completing challenges, such as viewing a series of web pages or playing mini-games on partner sites. The game was designed to encourage long-term engagement of participants, with repeat users earning frequent rewards.

The company attracted initial users via co-branding with a top-tier North American professional sports league, and then grew the user base using viral game mechanics that motivated participants to invite friends from their social networks. Other game mechanics focused on activating fans, friends, and others with brand purchases and trials via promotional integration. A microsite served as the participants’ dashboard, providing a central location to customize their avatar, view their progress, accept challenges and engage in social activities. The experience further required repeat visits to the microsite, strengthening participant association with the brand.

**Example: Major Entertainment Company**

One of the largest entertainment companies in the world wanted a loyalty system that not only rewarded purchases, but also rewarded participation and engagement with their content. This program gave points for purchasing Blu-ray and regular DVDs as well as movie tickets. Buyers then redeemed those points for dollar-value products, like more DVDs. In addition, members can earn credits for engaging with their content, like watching movie trailers, visiting movie websites, playing games, and contributing content. By combining offline purchase data with online engagement and participation data, they can now build a detailed profile of each of their customers. The resulting gamification campaign has:

- Increased consumption of promotional content
- Increased user-generated content
- Increased traffic to the individual movie sites
- Increased sale of products
- Developed a 360-degree view of their customers
Gamification: Key Questions for Best Practices

Now that we have a basic framework for gamification, a solid best practices program begins with a set of key questions to consider:

Is your product compelling?
No matter the quality of the gamified experience, it's only a wrapper around your core offering. Gamification cannot make an inferior product successful, but it might provide the tipping point that helps a good product find a larger audience, or turn a hit into a cross-channel smash. Gamification works best when turning an exciting, attractive product into a richer, more participatory one.

What is the context?
Will your audience discover your campaign on TV, in real-world stores, through social media channels, in print ads, or somewhere else? How will your early users help to grow your audience and through what means? Just as savvy advertisers connect TV, online, print, and other campaigns, consider how to extend the reach of the gamification process into other avenues.

What is the timeframe?
Gamification should be thought of as an extended process -- the most engaging games offer an experience that unfolds over time. This can be accomplished by making a deep and rich experience from the outset, or by evolving the experience over time, building its audience and drawing experienced users deeper into the game. Gamification is a long-term strategy, not a launch-and-leave-it one.

Time to market?
How soon do you need to gamify your site or application? What level of effort will be required to do this? Do you have the necessary resources to support, operate, and enhance your gamification solution over time? What kind of expertise do you have in-house to make this happen?

What is success?
Most important is to have a clear sense of what your business goals are and how you’ll go about determining if you’ve achieved them. This can be measured as strictly ROI, but there are other measures equally as valuable.
About the Nitro
Gamification Platform

The Nitro gamification platform is a highly scalable and reliable Cloud-based
service for gamifying websites, social communities, and mobile applications – it has served over 80 million unique users and 4 billion transactions to date.
Nitro’s flexible architecture enables our customer’s engineering teams to get up and running quickly, while our powerful administration tools empower the site production and marketing teams with real-time control over online user behavior. The platform delivers the industry’s most comprehensive set of game mechanics.

The World’s Most Advanced Gamification Engine:
Nitro is designed to make it easy for you to offer meaningful experiences to your users. Highly flexible and scalable, Nitro can be customized to your needs, but offers intuitive, easy set-up.
Core Nitro elements include:

APIs: For tracking user behavior and retrieving generated data, such as leader boards and newsfeeds. (These can be accessed via REST, JavaScript, and Flash.)

Components: For easy set-up and implementation, including an avatar builder, virtual room builder, trophy case, a toolbar and more. We have our own markup language, NML, which enables you to embed any Nitro content into your site without needing to write code.

Admin UI: Where you can configure your installation and generate reports. Once your engineering team has integrated Nitro into your site, it’s easy for site producers and the marketing team to change incentives, rewards and behavior, without needing any additional engineering assistance. They can also access Nitro’s powerful Analytics function to generate campaign data.

Easy Set-Up and Implementation

Engineers: Use the Nitro APIs (REST, JavaScript, Flash, Nitro Markup Language) to instrument your site and embed widgets and other data. For quick implementations, our Toolbar handles all the user-facing components, leaving you to just track the behaviors that you want to encourage.

Designers: Create assets for trophies, virtual goods, widget skins, and notifications, and insert them all into the system via the Admin UI.

Marketers: Set up the business rules for rewards and messaging in the Admin UI, monitor results with Nitro Analytics, and iterate.

Constant Evolution

There is a Nitro release every quarter, with new functionality that is immediately available to customers. By using Nitro, you are future-proofed.

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About Bunchball

Bunchball is the leading provider of online gamification solutions, used to drive high value participation, engagement, loyalty and revenue for some of the world’s leading brands and media. Customers including Warner Bros, NBC/Universal, Bravo, Comcast, USA Network, ESPN, and Hasbro use Bunchball’s Nitro gamification platform to create compelling, meaningful and enjoyable experiences for consumers, employees, and partners. Based in Silicon Valley and founded in February 2005, Bunchball’s investors include Granite Ventures and Adobe Systems Incorporated. For more information, visit Bunchball online at www.bunchball.com.