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*Growth Equity in Growth Markets Financial Services*

# **Gamification of Financial Services**



Q3 2014

## Introduction

Financial services firms have long trailed innovation, yet maintained healthy industry economics due to structural customer captivity driven by regulatory hurdles and inertia. However, the contextual reality is fast changing - demanding consumers and enabling technology are encouraging disruptive models whilst regulators are driving competition. We draw analogies from other industries to argue that customer - centric alternative financial firms may carve-out disproportionate share of industry economics unless the incumbents act with urgency to increase customer focus.

Gamification is about customer-centricity: it helps customers achieve their goals (in this case, financial ones) in a way that becomes a source of recreation in its own right. It is the use of game techniques to make business processes more interesting, interactive and appealing. Gamification has garnered significant interest lately, driven by an increasingly interconnected world of smart devices, the rise of tech savvy - millennials, and the mass popularity of gaming.

Generally speaking, traditional financial firms have a “productized” view of their services that is divorced from expectations and utility of these services to the customers. Gamification addresses this gap by helping financial firms understand the needs and desires of customers, and using experience design to engage people to achieve their financial goals. We find gamification being used by increasingly more financial firms across a wide range of applications - in product development, marketing, education and providing more interactive and responsive customer service. These attempts to gamify are mostly piecemeal and not structural, yet they have achieved significant traction.

We look at applications of gamification in the context of growth markets. To most financial firms, growth markets pose the paradoxical challenge of high growth potential, lack of a “traditional” client base and infrastructure, and low Average Revenue Per User (a term borrowed from telecoms), leading to low profitability if traditional distribution methods are used. Gamification is being used in these markets to catalyze lower use of high cost cash handling infrastructure, reduce the cost of customer acquisition and service delivery, and thereby foster financial inclusion through a sustainable, profitable distribution and service model.

As traditional business models evolve and psychology is increasingly a part of developments in distribution of financial products, gamification of financial services is inevitable. Improvements in technology, and rise of a more demanding and connected consumer are expected to drive a push towards gamification as one of the key tools of client acquisition and retention, as well as product distribution.

In the long run, we foresee gamification to be structurally disruptive to financial services industry by enabling accurate risk pricing capabilities and lower distribution costs. These developments are expected to flatten economies of scale barriers of the incumbents and result in significant affordability and increased customization of financial services offerings.

Clearly there are other complementary tools available to financial institutions, but we find that those that do espouse gamification as a core part of their retail strategy are expected to improve their competitive positioning and build customer loyalty.

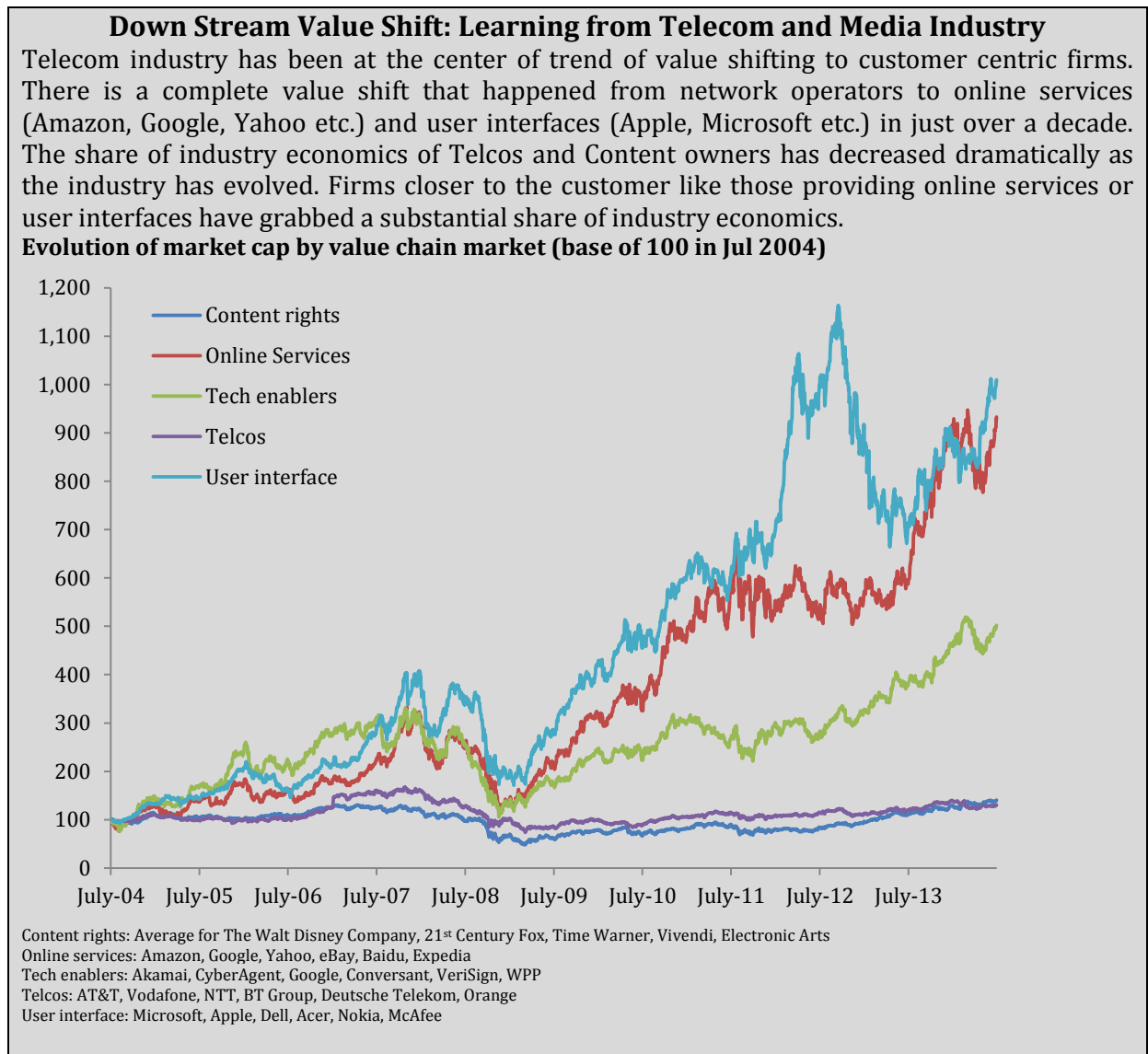


## Value shifts and gamification

Many industries, such as telecommunication and financial services, hitherto believed to be having wide economic moats premised on customer captivity have been caught unaware as the consumer today can be intermediated or poached away more easily than ever before. The structural barriers posed by large capital requirements and customer switching-costs have been flattened by technological changes.

Not surprisingly, many industries have seen critical part of value creation shifting towards customer engagement and retention. Firms that have been slow to change have been intermediated or disenfranchised by more customer-centric businesses. Upstream activities that were considered core part of value chain have become “non-core” and thereby have lost share of industry economics.

Gamification is a trend that manifests this phenomenon of downstream value shift by enabling firms to engage customers in a way that enables them achieve their goals and in the process retain higher share of industry economics.



Financial Services firms (much like telecom industry carriers) have all the tell-tale signs of vulnerability due to downstream value shift towards the end consumer. Protected by regulatory barriers, and high switching costs, incumbent financial services firms have been able to achieve growth and profits without having the need to rethink their existing models. However, there is a growing disconnect between what the customers desire and what is currently offered by the financial services companies. Inability of financial firms to fulfil expressed and latent consumer needs on one hand, and improvements in mobile technology and payments, on the other, has catalysed the emergence of alternative finance models. These emerging models are threatening to intermediate or poach away the existing customer base of the financial services companies. A number of start-ups have thrown the gauntlet at traditional finance like peer-to-peer lending (Zopa, Lending Club, Prosper, Kiva, etc.), mobile wallets (PayPal, Google wallet), payments alternatives (Square), Personal Finance tools (Geezeo, Mint, GreenSherpa, Blippy, etc.), and even in Banking itself (Simple, Moven).

A key underlying trend in all these innovative models is gamification i.e. behavioral understanding of the needs and desire of customers and using experience design to engage people to achieve their financial goals. Thus, gamification of financial services has already started to challenge the existing financial services industry. While incumbent financial services firms have started adopting gamification to stay relevant, the pace of adoption has been slow and piecemeal. As traditional business models evolve psychology will become increasingly larger part of client acquisition and retention, as well as product distribution.

**Intermediation/Disenfrenchising of Traditional Finance has started.....**



**Savings and Banking**



**Payment Systems**



**Insurance**



**Investment Products, Brokerage and Advice**



## Understanding gamification

Gartner defines gamification as: the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals. Gamification is all about client centricity; it is about appealing to the said and unsaid desires of people. It implies the process of appealing to natural human impulses, such as need and desire for simplicity, ease, fun, entertainment, social interaction, engagement, reward and competition, to achieve favorable outcomes for both businesses and consumers.

The term gamification was coined by Nick Pelling - a British consultant in 2002 to describe “applying game like interface design to make electronic transactions both enjoyable and fast on commercial electronic devices like ATM machines, vending machines, mobile phone etc.”<sup>1</sup> Since then gamification has been all pervasive and have been used in variety of industries. Various consumer firms are increasingly using gamification to re-define their offerings to the consumers and winning enduring customer loyalty while creating substantial franchise value.

The three developments, in our view, that have led to an increased interest in gamification concepts are – an increasingly interconnected world of smart devices, rise of tech savvy - millennials and mass popularity of gaming.

- **Interconnected world:** An increasingly interconnected world has opened possibilities to communicate with customers more frequently and engagingly. According to Nielson, Americans are spending on average 2 hours each day connected either through internet or mobile devices. Amongst the global population of over 7 billion, there are over 6.5 billion mobile subscribers world-wide<sup>2</sup>. So, 95% of the people in the world today are connected. Another important trend is the increased share of smartphones. There are over 1.5 billion smartphones currently and their penetration is growing at over 30% year on year. The rise of smartphones has allowed firms to engage with consumers in a way that was unthinkable a decade ago. Increasingly, consumers are accessing services, socializing, transacting and entertaining through their mobile phones, tablets and laptops.
- **Rise of Millennials:** Born after 1980, millennials is the first generation to grow up surrounded by the modern, “instant gratification” technology of digital media. They have no memory of a world without cellphones, handheld video game devices, online virtual worlds, and web browsing. They are the new consumers replacing the baby boomers and they are demanding greater engagement.
- **Mass popularity of gaming:** Globally, the online gamer community counts over 800 million people around the world. Not surprisingly, gaming today is a \$37 billion industry<sup>3</sup> worldwide and is growing at double digits. In the United States alone, there are 183 million active gamers (individuals that they play computer or video games “regularly” – on average, thirteen hours a week). The success of gaming industry is a testament that gaming is not just desirable but in a surprisingly vast population actually an obsession. The important question for businesses today is what they can learn from this trend to provide an equally immersive engagement to their consumers and employees.

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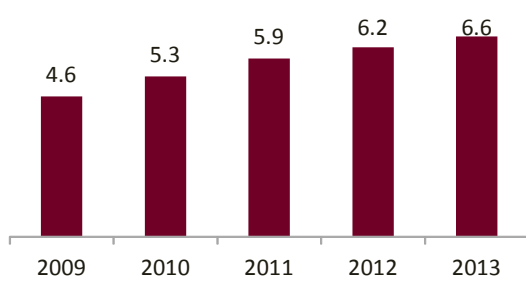
<sup>1</sup> From “Gamify” by Brian Burke

<sup>2</sup> International Telecommunication Union

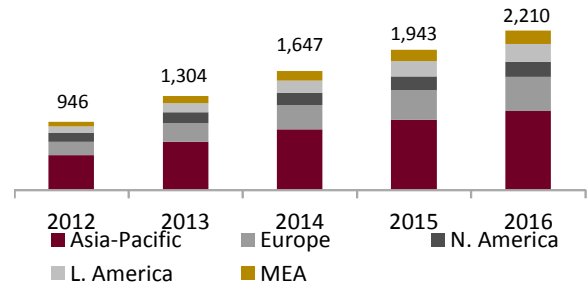
<sup>3</sup> [http://www.theesa.com/games-improving-what-matters/The\\_Transformation\\_of\\_the\\_Video\\_Game\\_Industry.pdf](http://www.theesa.com/games-improving-what-matters/The_Transformation_of_the_Video_Game_Industry.pdf)



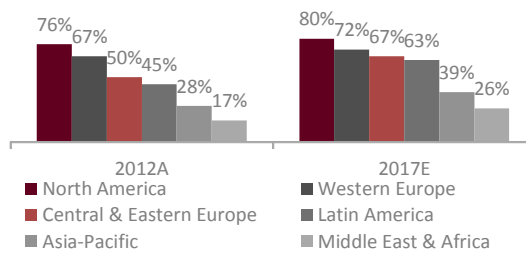
Mobile Phone Users (No. of people in billions)



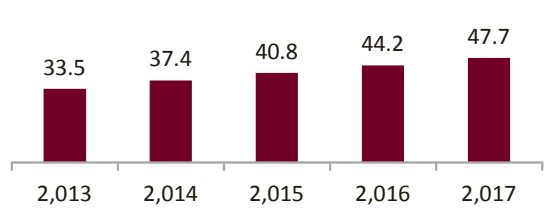
Increasing use of smartphones / tablets (Millions)



Internet Penetration By Region



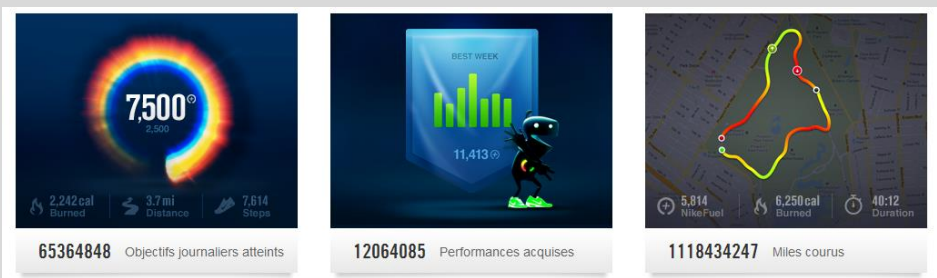
Value of online gaming industry



### Case Study: Gamification as a core strategy - Nike

A great example of a traditional businesses making gamification core to its strategy is Nike. Nike created a mobile app and hardware device that allowed it to completely change its product offering. Having fallen behind Asics, New Balance, and other more focused running brands, Nike developed – a software and hardware based solution, featuring location based services that relied heavily on games. The software could track the routes people ran, calories they burned and no of steps they took. When they downloaded the data on their computers their experiences became even richer. People could encourage each other to beat fastest times, or they could find themselves compelled to go faster or further or harder in response to challenges, accolades and prizes. This strategy allowed it to capture 50% of the 9 million active runners market in the US. Today gamification is central to Nike’s strategy. New gamification tools launched over the years like Fuel band, Spotswatch focused on casual runners have met with great success. The Fuelband, which measures movement and connects to Nike+ to monitor user-training experience within the game, sold out instantly when pre-orders became available. Whilst Nike has discontinued the Fuelband (in deference to its partnership with Apple who will release a band of its own shortly), there is now an entire industry being built around wearable devices.

There are significant implications for the future of both health and life insurance from this trend. Like many aspects of insurance, the way it has been priced has largely remained unchanged since the mid 1950’s. Just like telematics is changing motor insurance, commentators believe that it is only a matter of time that wearable devices create marketplaces where consumers can optimize the cost of their insurance by providing data from their devices, including their smartphones. This is yet another manifestation for the way data and particularly big data will disrupt financial services.



## Application of gamification in financial services

Gamification can enable financial services firms to add value across the entire value chain - product development, marketing and customer service & support. In fact thought creatively, any activity can be gamified. The key is to understand game mechanics that engage people and map them to desired business or functional outcomes.

One of the major drivers for gamification is the need for enterprises to ensure consumer engagement. Gamification can be used extensively to educate consumers, to market them services, to make mundane transactions tasks fun and more importantly mapping functional benefits to consumer benefits.

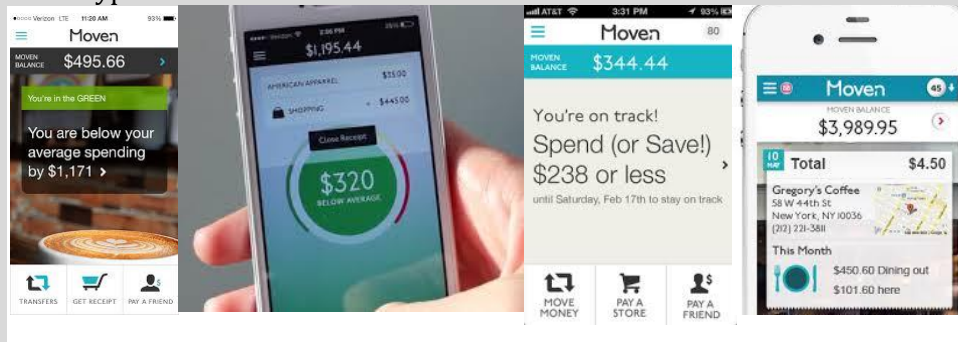
In this section, we explore the gamification trend in the financial industry and examine current applications. For incumbent financial services firms, capturing the full potential value from the use of gamification will require transformational changes in organizational structures, processes, and practices, as well as a culture compatible with sharing and openness.

Value Chain	Key areas for Gamification	Tangible Value Creation
<b>Product Development</b>	<ul style="list-style-type: none"> <li>• Crowdsourcing Ideas</li> <li>• Inter-company collaboration</li> <li>• Market Research</li> <li>• Credit Scoring</li> </ul>	<ul style="list-style-type: none"> <li>• Better Product development</li> <li>• Lower product development costs</li> <li>• Product feature improvement</li> </ul>
<b>Marketing, Sales and Distribution</b>	<ul style="list-style-type: none"> <li>• Customer education</li> <li>• Directed and engaged marketing</li> <li>• Referrals and lead generation</li> <li>• Need based cross-selling</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced cost of customer acquisition</li> <li>• Focused customer segment outreach</li> </ul>
<b>Customer Service</b>	<ul style="list-style-type: none"> <li>• Catalyzing customer behavior change</li> <li>• Interactive and responsive customer communication</li> <li>• Interactive self help applications</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced customer service costs</li> <li>• Better Customer experience and satisfaction</li> </ul>



### Case Study – Moven –Using Gamification across the Value Chain

Moven is the first branchless, paperless, and even plastic-less bank. Moven use gamification across its operations: customers sign in using Facebook, and bank “members” are encouraged to participate in a behavioral gamified engagement system called CRED. As depositors pay their bills, shift money between accounts, socialize, and play games, CRED gathers information. The bank markets CRED as a friend and colleague who helps customers with day-to-day financial decision making. Moven, meanwhile, uses CRED data instead of traditional credit scores. Social media intelligence, such as behavioral data and influencing skills (number of recommendations) are important factors in its ratings. Using only word of mouth on social media, Moven is able to enlist customers at below \$50 acquisition cost per customer which is an order of magnitude below traditional banking institutions. In addition to the significant improvement in customer acquisition metrics, once a customer is on the platform, there is further gamification in the form of real time feedback on spending patterns. As customers use their Moven payment functionality (primarily through NFC and sometimes through the physical card), the live app on the smartphone provides real time feedback on spending by tracking spend trajectory by type (e.g. discretionary versus essential spending) and time (how much they normally spend during the monthly cycle). This creates an incentive for the customer to spend on the Moven payment application by getting further feedback. As each transaction is a revenue event for Moven, this translates into real economic value. The average transaction numbers on Moven are up to six times those on a typical debit card.



### Product Development and Intercompany Collaboration

Gamification is being used by banking firms in crowdsourcing ideas, intercompany collaboration and market research. Financial services players are also using gamification to develop better insights about potential customers and assess how attractive they might be to acquire. Using social data, a bank or insurance company can generate relevant consumer insights more efficiently and potentially more accurately (given the larger volume of data) than traditional focus groups.

Lloyds TSB uses a game called Innovation market – a virtual marketplace of ideas for internal employees. The best ideas are then curated and turned into assets that can be traded, as on a stock market. Top concepts are then vetted by the organization itself, and when appropriate, implemented. The entire system is backed by virtual currency.

In the insurance context, a group of agents, field sales and corporate sales representatives might be willing to collaborate with each other if they are continuously reminded that the agency is well positioned to bag top honors for achieving the best sales conversion rate. Apart from personalized targets, setting up team goals by grouping teams based on department or region and indicating their progress and visibility to the end result on a periodic basis through a gamification platform can yield rich dividends.



**Marketing, Sales and Distribution**

Financial products are complex to understand, and most consumers like to educate themselves about them due to their importance in their lives. Not surprisingly, many financial firms are using gamification to educate consumers about various consumer products. These innovative education tools are novel ways to market their products. Done effectively, these educational tools can be used to engage with customers constructively and generate referrals and leads.

Customer acquisition is a very large cost for financial services companies. Typically, banks spend between \$70 and \$300 to acquire a new depositor or to persuade a customer to open another credit card account<sup>4</sup>. Furthermore, there are risks of adverse selection; the least creditworthy consumers are more likely to respond to credit card or loan offers, reducing the profitability of a marketing campaign. By using gamification, enhanced customer relationship marketing data, banks can target customers according to their specific needs.

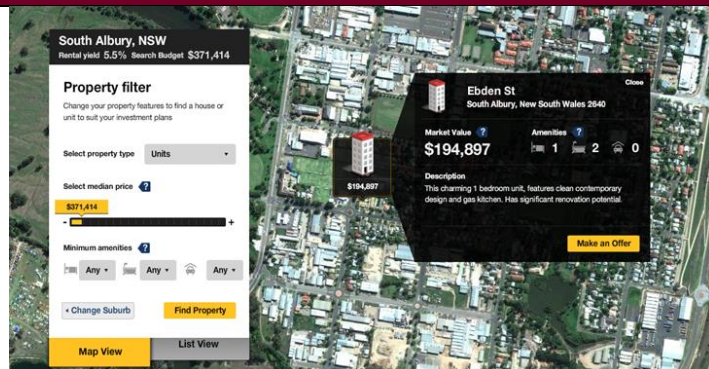
**Insurance**

Aviva Italy has developed a mobile app to evaluate users' driving skills. Every 300 kilometers it provides a rating of 1 to 10 on how the user has been driving. At the end of a trip, it also provides feedback on cornering, fuel efficiency, and accelerating and braking skills. Badges can be earned and shared on Facebook and Twitter. A quote for insurance can also be obtained.



**Banking**

Commonwealth Bank of Australia's has developed Investorville, a game which allows the bank's customers to simulate buying and owning a property. Players have to pay property taxes and go through different simulations on the impact of different types of mortgages and loans for their new hypothetical property.



<sup>4</sup> Brad Strothkamp and Elizabeth Davis, Financial services firms open up about customer acquisition costs: Forrester Research



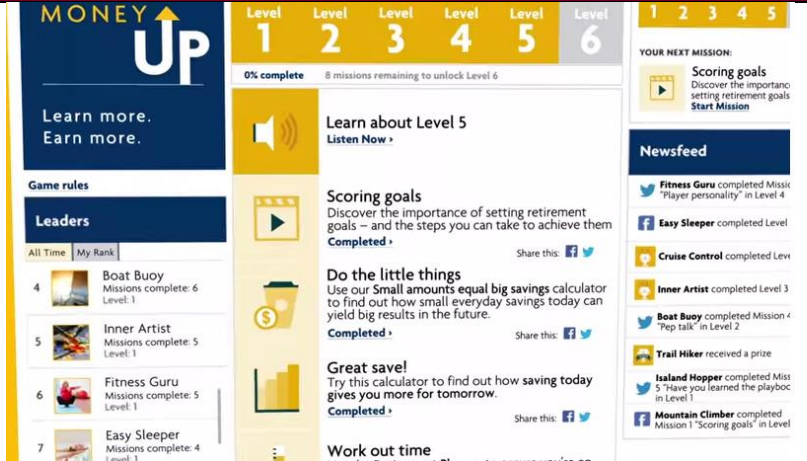
Payments

Barclaycard US, the payments business of Barclays in the United States, is using “gamification”—applying game design techniques to make non-game content and activities more engaging—to market “Ring,” a new social credit card it has launched in partnership with MasterCard. With the card, the company also launched “Barclaycard Ring,” a social community of cardholders. Members receive incentives for sharing their suggestions and ideas for credit card features. They compete for both in-community rewards (e.g., badges for switching to paperless billing and referring friends), and offline rewards, such as charity contributions through Barclaycard’s Giveback program.



Investment Planning

Canada-based Sun Life Financial has launched Money UP, an online gamification platform that aims to educate consumers on retirement and investment planning. The format of the game, which requires players to pass levels by demonstrating financial knowledge, appeals to younger members that are accustomed to quick feedback and tech-based learning.



### Customer Service

Customer service is a critical part of financial services, as they are provided over a long period of time and are critical in defining customer experience. Most financial services firms are ‘product focused’ and do little to understand the utility of these products in consumers’ lives. Ideally, bank accounts should allow consumers to know how much they can spend, whether their spending pattern is normal or aggressive, how much they need to save to fulfill their financial goals etc. Insurance firms should be using gamification to keep track of the health of its insurance holders or their driving patterns. While these gamifications can create immense value for the consumer, they are also likely to help financial firms by helping them price better their financial offerings, know when and what to cross-sell to each customer and generate leads and references.

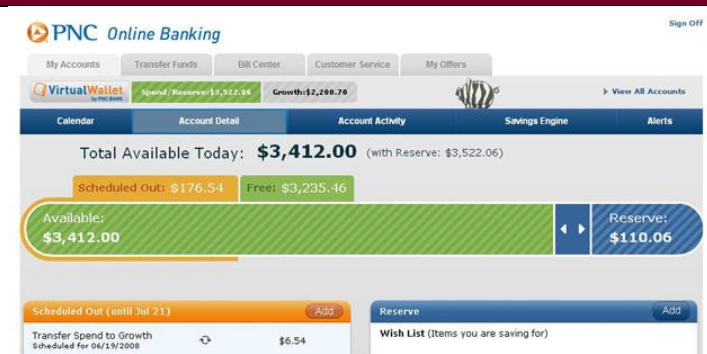
#### Insurance

USAA has developed an online application that users to compare insurance policies, pay bills, set renewal options, claim insurance and trade on a single user friendly and simple application. It allows users to set goals and evaluate how they are performing.



#### Banking

US-based PNC has developed “Punch the Pig”, a feature in its online banking platform. When someone is banking online, they just “punch” the piggy bank whenever it pops up and money — in an amount of the user’s choosing — will transfer from their Spend account to their Growth account. Users decide how often the pig pops up, or for more spontaneous types, PNC will surprise users by throwing it out there at random moments.



#### Payments

Marqeta is a card platform that has the ability to have multiple closed loop and open loop accounts on a single card. Essentially combining a nearly unlimited amount of prepaid, debit and credit accounts into a single piece of plastic. Marqeta uses smart analytics and gamified user interface to provide a win-win solutions to issuers and consumers



## Gamification and growth markets

The low penetration of financial services in growth markets has been primarily due to inability of high cost legacy financial infrastructure to service the market profitably. Lack of “traditional” client base and low ARPU (average revenue per user) has created a need for innovative low cost ways of client acquisition, distribution and servicing.

We find gamification being used as core part of strategy to drive financial inclusion in growth markets. It is being used to reduce customer acquisition costs, to discourage use of cash and to encourage low cost channels (like POS, cards and online banking). In addition, customer service costs can be substantially reduced through self-help gamified applications for online and mobile banking. There is significant potential of gamification due to large number of young internet savvy consumers and low penetration of financial services. For financial firms, gamification creates an opportunity to unleash potentially significant lifetime value of customer.

### Banking

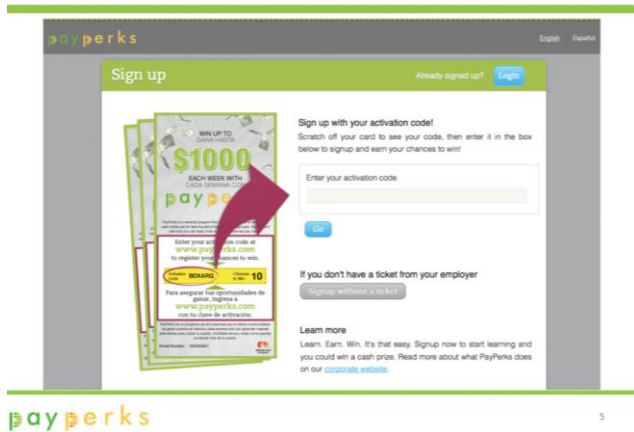
GTBank uses concepts of gamification to provide banking services over facebook through a secure facebook application. The application is optimized for mobile devices and offers an equally exciting user experience on mobile devices. Services available on GTBank social banking include, online account opening, airtime recharge, money transfer, and bills payment.



### Payments

PayPerks is an open loop pre-paid card that is designed with the low-middle income (LMI) customer in mind. PayPerks has an educational rewards platform that promotes financial literacy and savings-like behaviors among the financially underserved. Game-like experience provides people with chances of winning sweepstakes based on positive financial behavior i.e. lower cash/ATM usage and higher usage of card and POS, among others.

Users sign up by entering their activation code on PayPerks web or mobile site



## Future of gamification in financial services

We have seen in this paper various applications of gamification that meaningfully improve engagement, reduce distribution cost and improve service experience of financial services. We expect this trend to continue. In the long run we foresee the future implications of gamification of financial services to be structurally disruptive.

Increased penetration of smart devices and wearable devices, is leading to structural changes in socialization and increased acceptance of digital identity. Further, there is expected to be increasingly greater capability of 'big data' analytics. Overlaid on these developments, the potential of gamification to understand customers' behavioral patterns and psychology unleashes significant new possibilities for financial services.

In addition to reduced distribution costs, shrinking of systematic risk spreads driven by more accurate individual risk measurement is expected to be the most significant structural implication of gamification. The prospect of mining social media and gamification data is so appealing that America's leading credit analytics company - FICO is expected to adopt it in its credit scoring models. There are alternate finance players such as Moven and Lendup, who have already started using gamification and social data for credit scoring at an individual level. As gamification trend evolves, better understanding of behavioral data will result in more accurate risk pricing at an individual level. This will have repercussions on both demand and supply factors of financial services industry.

On the supply side, accurate risk pricing capabilities and lower distribution costs will flatten economies of scale barriers in financial services. Diversification and risk spreading principles that favored large firms will get challenged. For example in insurance, adverse selection risks pushed participants to consolidate insurance pools to be competitive. As scale economies vanish, competition is expected to increase and vanilla financial products are expected to become unviable for large financial services firms. For example, it is likely that 'Peer-to-Peer' lending dominates vanilla lending space. Further, we expect better understanding of individual risk and financial requirements will strengthen the trend towards customized financial service offerings.

On the demand side, reduced systematic risk spreads and lower distribution costs and greater competition will lead to significant affordability and access to financial products. Increased affordability of financial services should lead to financial inclusion at an unprecedented pace. Consumers are also expected to demand more customized offerings, and more engaged service levels.

Gamification is not just expected to impact the existing financial services, it may also open an entire new asset classes. Measurement of real time behavioral data and real time availability of risk metrics may allow trading of individual credit derivatives (there have been examples of loans given to students in the US against a share of future income of the individual). These developments can be expected to substantially grow the size of financial services market.

To conclude, gamification of financial services is expected to significantly increase the scope and scale of financial services in the future. Firms that successfully employ gamification as a critical tool to better understand the consumer will strengthen their competitive positioning and tailor pricing thereby improving economics.



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