Gamification in Insurance

One of the hottest buzzwords in the consumer software market is “Games.” Recently, many companies have tried to apply the techniques which game developers use to their consumer facing applications in order to drive consumer traffic and interest to their organization. Insurance is one such area where application of game-like-techniques in customer interactions can transform the customer engagement. This paper describes various key strategies and key components structured in a gamified-business framework, which will enable insurers to add a gamified flavor to enhance user adoption of their offerings.

This paper also focuses on the next generation of gamified offerings from TCS Innovation Labs – Insurance, which will help insurers to improve their business in strategic ways.
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Introduction

Wikipedia defines “Gamification” as the use of game design techniques and mechanics to solve problems and engage audiences.

Gamification has become a critical factor for consumer facing applications. It is an effort to increase user adoption by creating a sense of engagement so that the user sticks to the application and comes back more often. One of the primary reasons for gamification is the revolutionary changes happening in consumer preferences. Consumers have become more participative, more demanding, more active and more tech-savvy. They are becoming increasingly aware of the latest technologies and they spend more time with social media and smart mobile devices. They have transformed themselves to be digital residents, as opposed to digital visitors, making it necessary for businesses to adopt new technologies as well, which in turn will excite, engage and retain customers.

Research firm Gartner stated that Gamification is positioned to become a highly significant trend over the next five years, with more than 70% of the Global 2000 firms to have at least one gamified application by 2014. [1]

The benefits of gamification are not limited to the IT landscape; it can be applied to business processes as well and has the potential to transform enterprise program management and BPM. Gamification can change the way processes are being executed in organizations and if implemented properly, can help organizations to realize the benefits of enterprise level process transformation programs.

Some Business Implementations

Gamification has emerged as the new normal in the customer servicing segment, and a number of significant implementations demonstrate its success. Some of them are listed below.

Starbucks offers customer rewards with “Foursquare” gamified app

Starbucks, the world’s largest coffee chain, started rewarding frequent visitors to their stores by means of Foursquare; a gamified location aware mobile app. Foursquare lets users check-in to a real world location through a mobile app.

The user with the most check-ins in a given location can become the “mayor” of that location in the game. Additional rewards include unlocking different “badges.” Starbucks offers mayors of individual Starbucks stores the ability to unlock the Mayor Offer and enjoy a money-saving perk for their frequent store check-ins. Additionally, the game also alerts the user about rewards which he or she might get if they checked into multiple Starbucks locations nearby.

There is also a social aspect to the game. Foursquare users can share their check-in location and their achievements with their friends on Foursquare, Facebook or Twitter, which ultimately popularizes the Starbucks and markets their products, stores and promotional offers.

Starbucks tries to relate loyalty and social media through this gamified approach, and it is likely to have a positive impact on their marketing and sales.
Popular Q&A Platform Quora provides credits for answering questions

Quora is a continually improving collection of questions and answers in a crowd-sourced manner with the aim of providing the best possible resource for someone who wants to know about a question. Like the conventional way of finding experts in any crowd-sourced online knowledge base, Quora identifies the experts who can provide the best answer to a particular category of questions.

All users can now earn credits for a variety of positive and user engagement-magnifying behaviors like answering questions they've been asked to answer, getting votes on answers to questions they've solicited through the “Ask to Answer” function, and getting votes on their answers to other questions. Users can also give each other credits and can be managed through a gamified credit interface. [10]

The Quora credit game mechanics reflects their business model. Quora could reward experts for providing the best possible answer to a question and can someday change virtual rewards to monetary ones. In fact, users will be paying experts for the best answer.

Frequent Flyer Programs from various airlines

This is one of best examples of successful implementation gamification in a business context. Frequent Flyer Programs employ a simple mechanism that tracks the customer flight segment which customer has flown and attribute some “rewards” in the form of “miles” to the customers. The customers can use these reward points for tangible benefits like free upgrades to business class for domestic travel. They again set levels or categories like bronze, silver, and gold, which travelers compete to achieve. The status and rewards associated with these levels drive behavior. There are even more nuanced aspects that benefit business in less direct ways. Sometimes, the airlines offer deals with conditions, like flying within 30 days, and then offer extra rewards like bonus miles. These types of offers can compel the traveler to choose the particular airline even if he or she is not satisfied with their service. In this way, the game mechanics can even help in improving an airline's bottom line.

Adoption Among Insurers

Currently, insurers are using the strategy of Gamification to improve their market penetration through educating the end user. The insurer engages the end user in a very interesting game, during the course of which the player will realize the necessity and the benefits of insurance. Different life and non-life companies have employed various strategies to this end. The life insurers tend to simplify the insurance jargon and help the end user decide on the product which he needs to buy, whereas the non-life insurers tend to demonstrate the potential benefits which a person can accrue on his or her tangible or intangible property if he or she purchases the necessary insurance.

For example, Farmers Insurance Group, a leading P&C Insurance company, identified the opportunity to educate on the benefits of having insurance coverage through online social games such as Farmville and Cityville.[2]. Here the user gets virtual insurance to protect his virtual assets in the game, giving him a better game experience. Though virtual, it results the person playing the game having a natural proclivity towards the company. Similarly, AXA Equitable, a leading life insurer, launched an insurance
game that intuitively explains the necessary coverage a player can opt for, covering his and his dependents over various life and health-related perils.

Along with this “gamified” education, these efforts indirectly result in increased brand penetration, improved lead generation and finally, better future business for the carrier.

Apart from computer-based virtual-games, insurers are also plunging into real world gamified strategies with real rewards specifically targeted towards auto insurance. For example, many insurers are now experimenting with the concept of Pay as You Drive insurance.

A telematics enabled device is plugged into the vehicle, collecting data on acceleration, deceleration, braking, and rules violation and storing it in the insurer's database. There, it is used to calculate a specific score relative to the driving characteristics of the driver.

This score and the associated data can be used by the insurer and employed to offer rewards such as premium discounts for people with better driving skills.

With this real-life gamified strategy, people tend to drive more carefully in order to earn more safe driving points and then more premium discounts. Though discounts are given as rewards, in the long term the approach will reduce the number auto claims, improving the insurer’s profitability.

Insurers are also trying to bring the concept of virtual-reality with real human interaction. Humana, a leading health insurance provider, enabled the use of XBox Kinect to train people on the different aspects of physical fitness. The game is focused on the end customer who “works out” with the motion-tracking interface of the game to burn calories and stay physically fit. It also helps to teach children habits to prevent obesity, and has gamified tools to help seniors control their blood pressure and live a healthy life.

**Potential & Opportunities**

Peter Drucker memorably said, “the purpose of business is to create and keep a customer,” a description that Gamification embodies. A recent survey by M2 research points out the Gamification market is set to reach $2.8 billion in the United States by the year 2016. The research also found that enterprise demand for gamification is skyrocketing.

Leading analyst firm Gartner has added Gamification to their hype cycle for emerging technologies, 2011. According to Gartner, Gamification is just finishing its initial rise in the hype cycle and expectations are peaking.

Another reason for the emergence of this trend is an upcoming generation of more tech-savvy consumers. Anyone who had an Xbox or Nintendo at 16 is also likely to have a brain receptive to game elements. It’s this mindset that exemplifies the need to have gamified applications to better engage the next generation of customers. Gamification will accelerate the movement from physical to online solutions, and has become the “new normal.” It is as important as social or mobile solutions in the digital strategy of a business.
Gamification can, however, still be better utilized in realizing business objectives. Below are some of the business objectives that could be more easily met by means of gamification:

**Customer Engagement:** Gamification substantially improves customer engagement. Gamification transforms an ordinary application into an interesting one and makes it fun to use. It creates stickiness to the application so that the users keep coming back and enjoy using it. It shrinks the entry and adoption barrier for business applications. Moreover, it creates an emotional bond between applications and their users, transforming customers into loyal fans.

**Brand Awareness:** The ultimate aim of any business is to convince customers to buy their products. Gamification can be of great help to marketing. It can help in increasing brand awareness, affinity and purchase intent.

**Enterprise Program Management & BPM:** Enterprises face various challenges in executing successful BPM programs, especially in getting coordinated work done across organizational boundaries. Gamification offers engagement and motivation techniques to rally disparate forces to work toward collaborative goals.

**Improve productivity at workplace:** Game mechanics can play a great role in improving productivity within an enterprise. By applying game principles like capturing statistics, communicating standings, and rewarding accomplishments, we can create a new means of driving participation, thereby improving productivity. Gamification can even make enterprise apps fun to use. Another beneficial aspect of gamification is that it can help in creating a community of like-minded members, taking productivity to even higher levels.

**Education:** Gamification can help in educating customers about the products and services you offer, and intuitively guide them to choose the right product. User and employee training is another area where gamification can play a greater role.

**Motivation:** Gamification can keep individuals incentivized by applying elements like challenges and competitions. These game principles can keep the customers or employees focused towards achieving something and rewarding their accomplishments, further boosting their motivation.

**Gamification**

**Game Mechanics**

Gamification is all about applying game mechanics to non-game activities, which results in a change of behavior and brings a sense of engagement. In business, gamification is about making “something” more fun, engaging and interesting by applying game mechanics to encourage behaviors that might not otherwise be present.

It could be applied to the business’s web portal, marketing campaigns, CRM application and virtually any application that requires active participation from a user community.
Let’s take a look at how the concept of owning and operating a farm was made interesting by Zynga with their Farmville game. Zynga applied game mechanics like gifting, virtual goods and tying value to gifts, all of which made their program interesting to use.

Similarly, Foursquare is one of a number of interesting location based games that have recently became popular in the mobile channel, where people compete to check in more often and get recognition with badges such as “Mayor.” Game mechanics like providing recognition for achievements and facilitating competition all played key parts in making Foursquare interesting and popular.

One of the most interesting case studies on the use of game mechanics to solve scientific problems is from the University of Washington. They developed an online game based on folding proteins. The game is called Foldit, and it’s deceptively simple: drag parts of protein around to get it to the optimal energy state. The higher the energy state, the more points you get. The game used data from a protein structure program, presenting users with a chance to solve a problem that had proved challenging to simulate using only computers. When the collective intelligence of the “web” met game mechanics, the results were astonishing. The players (members of the public) solved a decade-long protein structure mystery by means of a game.\(^7\)

Simply put, game mechanics are any of the techniques used to gamify an application. Some game mechanics are:

**Achievements**

Achievements can act as motivators, and can range from points to real world monetary benefits. Players always like to gain something from a game, be it virtual or otherwise. The game could provide achievements in the form of points, which may or may not be tagged to real world benefits. Studies have proved that regardless of the real world applicability, points always boost psychological motivation.

The level of motivation will be even higher if the achievements from a game can be shared and compared against the player’s acquaintances. Games providing such features have always fared well when compared to more solitary games that consist primarily of competing against one self.

The achievements aspect can be enhanced by tagging it to something that resembles accomplishments like in the case of Foursquare, where badges provide a feeling of accomplishment. If the user can relate the game accomplishments to some real world rewards, it will make it even more compelling. Achievements also induce a user to play to the next level of the game, leading to more time spent with the application.

**Rewards**

Rewards are another major motivating factor. It helps to attach value to accomplishments in a game, which keeps the interest and motivation factor high. Rewards can either have a real value or a virtual value in a game. Like in the case of Farmville, rewards can be in the form of virtual gifts or goods. Rewards can also be in the form of points, which the user can exchange to get something tangible or intangible in the real or virtual world. One of most popular games from Electronic Arts, Need for Speed, uses the concept of virtual cash as rewards, which the players can use for purchasing cars and car accessories in the virtual game world. In short, rewards make achievements valuable in a game.
Fame

One of the major reasons why humans are driven to achieve something is to gain attention, recognition or fame, be it in the real or virtual world. Games should facilitate this. Like in the case of Foursquare, becoming the mayor of a particular location grabs the attention of others who check in to that place. This ultimately provides fame or a feeling of attention to the winner. Adding a social layer on top of the game with features for publishing achievements via popular social networks like Facebook or Twitter provides further excitement to the user community.

Surprise Element

Points or rewards in a traditional loyalty program are predictable and usually gained incrementally. However, in games or gamified applications, the users can be provided an unpredictable reward in the form of an occasional jackpot or bonus. Users like the element of surprise in a game. One of the best examples of this is the casino slot machine. People stick to the game even though they know that statistically, the house always wins. It's the element of hope that they can hit a surprise jackpot which makes them keep playing.

Mystery

In addition to surprises, people always love exploring something new. This is a primary reason why "treasure hunts" are so popular. Users tend to know what’s deep inside the game. Before they even clear level 1, interest in the mysterious level “n” has taken hold.

To keep up the level of excitement, many traditional games contained “cheat codes”, which enabled players to cheat the game and do things they would otherwise be unable to achieve easily in the game. Most players considered cheating the game fun, or even an added thrill. Cheats are most often used in games targeting power gamers, those who have niche gaming skills. Since the complexity of these games is a bit high, the user might lose interest if he or she were to be unable to clear certain levels even after repeated attempts. Cheats help this set of users remain excited, since they get a chance to unlock the mysteries by taking a shortcut.

Challenges

Users like to have challenges in a game. It glorifies the value of achievements and rewards in the game. Challenges also help in framing a motive for the levels in game. It keeps the user focused. If rewarded appropriately, users will be able to appreciate the value of the accomplishment. They will be more likely to come back to solve the next level of challenges in anticipation of a higher or better reward. It provides psychological satisfaction when one achieves a reward after clearing a challenge.

Levels

With the excitement and motivational factors that challenges offer in a game, it’s important to break up the challenges into achievable levels. Users enjoy challenges only when they are provided in an incremental fashion. With levels, users can be provided with the benefits of periodic rewards based on the challenge they have cleared. This keeps the motivation factor consistent throughout the game.
Competition

Competition helps in improving performance and motivation. Creating a competitive environment always boosts performance via the natural human desire to perform better than other players and thereby gain fame or attention. Winners also tend to gain satisfaction by comparing their score or performance with other participants. This is the primary reason that “multiplayer” games are exciting.

Social Connect

This is one new trend in game mechanics that has emerged due to recent changes in technology, specifically the emergence of ubiquitously connected smart devices and the social networks. People love to do certain things as groups, especially with their friends. They seem to show lot of interest in playing games together in a virtual environment that mimics real world social environments. Building a social layer in games serves this purpose. For instance, users can now play games like chess or cards with their friends. The fame and competition aspect will be taken to an entirely new level with the addition of social connections to a game.

Figure 1. Areas of thrust in game mechanics

The following graphics from Bunchball shows a simple table that matches up game mechanics (points, levels, challenges, etc.) with human desires for game play. Each of the mechanics matches a primary human desire, but most of the mechanics also impact an ancillary area as well.\textsuperscript{(11)}
Understanding human desires and psychology plays a big role in the design of game mechanics. When we couple the psychological aspects of game mechanics with best of what technology can do, we get a gamified application or a game.

In order to come up with better game mechanics for business, we need to understand the psychology of the end-users who are most likely to be consumers. Most of the consumers are not power users and they don’t usually understand the “tweaks” which a hard-core gamer or a programmer will. So, even if the business attempts to gamify the consumer application by applying all of the design principles of game mechanics and by employing best in class technology and interfaces, they still face the challenge of a high adoption barrier.

However, there are lots of games out there that demystified the adoption barrier issue. Angry Birds is one example. If you are a smartphone user, it’s likely you have stumbled upon this game, and possibly gotten addicted. Games like Angry Birds have an almost nonexistent adoption barrier, making them fun to use even for a novice. The game has been a hit among almost all age groups. Angry Birds caters to the category of people known as “casual gamers.” But even for serious players, there are enough challenges in the game to keep you hooked.

If we make a customer facing or enterprise application like Angry Birds, then the user adoption and engagement will be high. The gamified business application should have a low adoption barrier so that even a first time user should be able to use it. On the other hand, it should provide enough challenges and excitement that the user will stick with the application. Game mechanics that don’t increase the adoption barrier can be used, like adding a surprise element, achievements, rewards or challenges.

As analyst firm Gartner points out, “For a gamified application truly to engage its audience, three key ingredients must be present and correctly positioned: motivation, momentum and meaning (collectively

**Figure 2. Illustrates the interaction of basic human desires and game play. The orange dots signify the primary desire a particular game mechanics fulfills and the blue dots show the other areas that it affects**

(Source: Bunchball)

**Game Mechanics in Business**

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known as "M3"). If a gamified application misses any of these ingredients, runs the risk of falling into disuse once their novelty wears off. Motivation is inspired primarily by extrinsic rewards and/or weak intrinsic rewards to direct behavioral changes. Extrinsic motivation comes from outside an individual in the form of rewards such as money and grades. Intrinsic motivation exists within an individual and derives from that person’s interest in, or enjoyment of, the task. Momentum depends on sustained engagement. In gaming, momentum is achieved by balancing the difficulty of the challenges presented with the skill levels of the players. If players find challenges too easy, they will soon get bored. On the other hand, if challenges are too difficult, players will become frustrated. Gamified applications need to engage players quickly and maintain their engagement through deft use of game mechanics such as challenges, rules, chance, rewards and levels. Meaning is about serving a larger purpose. To succeed, gamified applications must provide rewards that are meaningful to the participants. Different people will find different rewards and incentives meaningful, but many will value opportunities to help charities through donations, lose weight, master a specific skill or achieve a significant task.[1]

Why Businesses Got it Wrong
The primary reason why user adoption is poor for business applications is that business and enterprise apps are not easy to use and are normally focused on only core business objectives. Many organizations are also still trying to understand consumer motivations.

Another major reason for the less-user friendly nature of business applications is the IT ecosystem of these enterprises. Most of the time the end user and buyer are not the same, and the enduser doesn’t have a say in what’s being bought. These applications get designed and built in a top-down manner, and are oriented towards serving the needs of the senior management instead of real users. If we take the example of an enterprise CRM application, it is mostly designed to help top management to run a set of reports rather than to benefit the representative.

Most gamification attempts miss the mark because they failed to bring positive behavioral changes to the end user. Enterprise IT departments didn’t understand their customers well and the implementations failed.

The Proper Approach to Gamification
The potential of gamification is enormous if successfully implemented. The success factor depends on parity between the “purpose” and the implementation strategy.

The following are the various steps involved in the proper approach to gamification.

Identify Motive/ Purpose
Defining the end objective clearly is key to defining the implementation strategy. Some of the objectives targeted by gamification initiatives are changing customer behavior, creating deeper, more engaging relationships, and improving efficiency in processes. Clear definition of these in a business context will aid in choosing the right game mechanics.
Define User Group

All game strategies won’t fit all types of users. For a successful implementation, it’s imperative to define the user group based on their skill set and abilities. Users need to be classified based on their abilities. Once classified, define stages of mastery for each user category.

Identify Game Ingredients Suiting the “Purpose”

Game ingredients involve various factors like motivation, momentum, virality and fun.

Identify the ingredients matching the purpose or end objectives. For instance, providing the proper “motivation” ingredient could satisfy the objective of changing user behavior.

Identify Game Mechanics for game ingredients

The next step involves identifying the right game mechanics for the game ingredients selected. For instance, the game mechanics “Rewards” can be mapped to “Motivation” ingredient. The mapping could be one-to-many or many-to-one.

Define Flow Zone and Filter out Game Mechanics

More benefits will be realized if the game is not too complex for a novice user and not too simple for a skilled user. It has to maintain a balance between “Anxiety/Amusement” and “Boredom”

Define the flow zone12 by plotting Challenge Level versus Skill Ability (which has been identified in step 2)

Map the Game Mechanics on the plot and filter out the ones that don’t remain in the flow zone.

Figure 3. Defining flow zone.
**Game Thinking**

The process of game thinking involves conversion and mapping of game mechanics to a game scenario or application.

This could involve using game mechanics at various user interaction touch points.

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**Opportunities within Insurance**

The strategy of Gamification in insurance can be applied to various areas in the insurance value chain, such as product development, sales and distribution, and new business. The players for this gamified approach can be classified in two categories i.e. end customer and the distribution personnel i.e. the agent.

**Product Development**

During product development, the insurer needs to understand the real need of the target group to which the product is sold. If the insurer is able to tap into the requirements of the target group, it will help the insurer design the product to fit directly into the customer space without much effort.

The best strategy under product development is one where the players are made to discover the product they need on their own in a game like manner.
With the increased online activity of Generations X and Y, the interest or purchase propensity towards a particular insurance product is highest through a personal referral, rather than through the word of advisors or agents. The game will sit over a social networking website, and each player will be asked certain questions about their closest friend’s lifestyle in a quiz like manner which will be published in their own networks. Over time, the data collected by the game matures, and the game reciprocates and spreads between other players and their network. This enables the insurer to get a clear picture on its target group, and helps it begin to understand their needs. This strategy is inspired by a viral quiz game called Social Interview, a game that was used by more than 40 million users during the time immediately after its release\cite{11}. A game of this kind will help insurers to achieve this objective by making them understand the target group, their needs, and their lifestyle and create products which will exactly fit in their space.

**Sales and Distribution**

The strategy of Gamification can be applied to another area of insurance value chain: sales and distribution. The player in this part would be the related insurance personnel, for example, the agent or the sales executive. Gamification is in some way is an inherent part of sales where each sales executive or agent competes with one another in converting prospects to clients, bringing in the written premiums by selling policies. The key problem associated with sales is determining which product meets the customer’s needs. The customer might not be sure about the product, and the ability of an agent to identify the need or problem and suggest the right product is a challenge. This can be approached by a game, which will enable the agent or the sales executive to come up with a product that will exactly fit with the customer needs. This game will take the risks presented by the customer as well as the agent suggested product component as an input which is believed to lessen the risk. The game will then compare the risk and the risk-mitigating component selected by the agent, arriving at a score contingent on how efficient that risk-mitigating component is in lessening the risk. The higher the score, the more appropriate the product. For example, the risk can be, “a first time driver with an expensive car,” and the risk mitigating product options can be “auto insurance with X amount of coverage”, “auto insurance with Y amount of coverage with Z deductible”, “auto insurance with X amount if coverage, W amount of deductible, and U amount of personal liability coverage.” The agent will choose the appropriate option and will get a score based on the intelligent-internal logic of the game, enabling them to suggest the best possible product.

Another approach utilizing Gamification would be one where the agents have an internal forum where they can post questions on a particular issue. Other agents would then get points for the answers they write. The person who gives the best answers to the issues raised by other agents will get credit points with a virtual reward tagged to it.

Apart from this, insurers can also look into leveraging the virtual world capabilities of programs like Second Life, where the distributors can virtually collaborate, arrange workshops, and attend conferences to get connected with peer agents or the end customer.
New Business

New business carries a similar potential for gamification. Converting a prospect to a client is a tough task. Identifying prospects and their conversion to clients is the first step towards new business and new written premiums. Insurers generally offer online quotes, quotes apps on mobile devices for prospects to access and begin to explore their insurance coverage options/products, which generally happen to a lower degree. Otherwise simple quote process can be gamified into one where the quote data is entered by the prospect in a game-like manner, then the probability of conversion increases. Adding intelligent interactive characters on top of the quote generation logic can be one way to attract more prospects towards the quote completion and conversion. An intelligent interactive character that can speak as well as respond to the user queries and inputs in natural language is appealing to users, drawing them in and putting them at ease. Having a gamified agent like a virtual character keeps the prospect involved throughout the entire quote process, and can even make them more likely to sign up for the policy online.

To get new business an insurer needs to generate leads. Leads can be generated only when a prospect has a good idea of why he needs insurance. Educating the prospect to close this gap through gamifying the learning process is a great opportunity.

Various approaches are possible to attract a larger group. In auto insurance, the player plays a simple virtual car game where the goal is to safely take the car from one end of the track to the other end without hitting obstacles or cars passing by. The game can educate the player on claim procedures for both physical damage and liability, making him more aware of the need for auto insurance.

Life insurers can deploy a game similar to Chutes and Ladders, where each ladder can represent an insurance coverage level or product, and each chute a life or health related peril. There can be games where the player has a specific role to play and certain responsibilities to fulfill. For example, an insurance role-playing game could feature a virtual AVATAR of the player with a virtual lifetime. He will be posed with certain real-life equivalent virtual quandaries, the responses to which dictate a player's lifetime. In this process, the game educates him on the necessary steps to take during different stages of his lifetime. As an example, getting car insurance when purchasing a car as a teenager, getting unemployment insurance as soon as he gets his first job and getting life insurance and adding beneficiaries to it when getting married.

As the player completes the game, he becomes aware of the necessity of insurance, subconsciously probing his own life for areas where an insurance policy might be appropriate. A simple quote application is linked to the game application. By starting as soon as the game completes, this additional component aids in converting him from a prospect to an insured.

In the case of group insurance, many member-based insurers are implementing innovative methods to gamify their existing distribution processes. For example, some member-based insurance carriers are giving members the flexibility to form their own groups or communities to find better offers on the insurance products under group insurance, as this reduces the probability of adverse selection by the insurer. To gamify the process, the insurer would choose to implement the aforementioned components with game mechanics.
Risk Management

Apart from insurance, which is one risk management technique, games can teach players about other risk management techniques as well. The insurer can employ virtual simulation games wherein the player learns which risk management steps mitigate which types of risks, the types of risks he should avoid and the type of risks he should transfer to the insurer. Based on this, the player becomes more risk aware and understands the real need for risk management and its constituent-insurance.

Servicing

Servicing is one aspect in the insurance value chain that requires a lot of effort from customer representatives. The insurer or the associated provider faces a major challenge in training their employees to address the various service requests that the insurer gets on a daily basis. Applying Gamification to address this pain area would be the best possible approach. A solution that will train or educate the staff by leveraging the above mentioned components in game mechanics would solve this issue effectively.

Gamification is not limited to the above mentioned areas, and can be applied to any existing process in the insurance value chain. Targeting the end user is the main objective, whether it be the customer, agent, broker or adjustor. If excitement is added to the current process by gamifying it, its usability and adaptability increases, thereby resulting in higher productivity and organizational alignment to previously defined goals.

Technology & Ecosystem

Gamification is primarily focused on the psychology of the user group. However, technology and the tech ecosystem have roles to play too. Technology has transformed consumers into digital residents. They tend to spend more time in social media than traditional channels, and prefer to stay connected with smart mobile devices. The mindset shift of the end consumer and the results that can be achieved with today’s technology play a crucial role in defining the gamification strategy and mechanics.

Gamification in its essence is not limited to the digital arena. It could be applied to processes and business models as well, and it can play a big role in transforming the behavior of participants by making activities more inclusive, engaging and fun.

From a digital strategy perspective, gamification shouldn’t be limited to traditional delivery channels like the web or user terminals. It has to utilize mediums that are more connected to the user in order to improve engagement and interaction. Some of the current most popular channels include mobile and social platforms.

The ubiquitous nature of connected smartphones can be leveraged in gamification design. Mobile devices have emerged to be the key personal conduit to the web in the post-PC era, with additional capabilities like location awareness, wireless connectivity, orientation detection and cameras adding levels to the experience that are often not available on traditional desktop computers. Gamification strategies can leverage these capabilities to create a more personalized and context aware experience. This awareness can push gamification strategies to next level where engagements are deeper. Adding personalization will help in establishing emotional connection, and mobile devices can also been seen as an entry point to a person’s social networks.
Increasingly, interactions via social media are even more effective than real-world interactions. Younger consumers have begun to communicate more via social media than “traditional” means like email. Social networks are creating parallel worlds, with all the real world interactions being transformed to equivalent virtual ones. User adoption has been high for popular social networks like Facebook and Twitter, to the point where if Facebook were a country, it would be the third most populous one. Gamification initiatives should exploit the potential of social media. It provides an easy way to stay connected with consumers. Additionally, the ability to form communities of like-minded people and other collaboration mechanisms offer a big opportunity for gamification. People love to play games and do things like watch video clips as groups, and this power can be leveraged in game mechanics. Additionally the sharing of achievements via social media helps supplement the “fame” factor of game mechanics, and the ability to send “virtual goods” or “rewards” makes it a compelling medium.

Mobile and social media are excellent content delivery platforms as well. Viral marketing campaigns can prove to be successful on these channels. Another big advantage that is offered by these channels is that notification mechanisms are baked into their cores. Gamification designs can tap into this capability. The availability of popular distribution channels like Apple’s AppStore, the Android Market and the Amazon AppStore is also beneficial for taking the apps to the customers via their preferred channel for interaction.

Stepping even further afield from the desktop computer, gamification initiatives can tap into the console gaming technologies offered by companies like Microsoft, SONY, and Nintendo, which are now redefining human-computer interactions through gesture-based technologies. People will love to use a gamified business application on an Xbox 360 equipped with a Kinect, a setup that allows them to interact with the app through gestures and natural language, eliminating the need for controllers.

The best way to make a gamified application to be accessible to a vast majority of users is to humanize it. Technologies like Xbox Kinect solve part of this problem by humanizing some of the interactions with the computer. Another big part of the problem can be solved by leveraging Natural Language Processing (NLP) and Artificial Intelligence (AI) technologies that enable users to speak and express their emotions to the computer. Leveraging such technologies could make the gamified application more cogent and persuasive.

“Siri,” the virtual assistant smartphone program from Apple, has the potential to unlock even deeper human interaction with a gamified app. If a gamified application can interact with the user by means of a virtual assistant like Siri on a mobile device, bringing in the additional power of social media, it could revolutionize gamification initiatives. Unfortunately, as of yet Siri doesn’t support integration with third party programs.

Television, though not seen as an app delivery platform today, could emerge as a popular distribution channel for gamified applications considering its place in personal digital life. With the emergence of technologies for integrating media or content delivery platforms like television, mobile devices, the web and more, in near future we can expect the living room TV to able to do pretty much everything that a smartphone, tablet or computer can do today. Some of popular initiatives such as Apple TV, iCloud,
Google TV, and Android at Home are already trying to connect television and other digital content delivery channels.

Technology and the associated tech ecosystem can create deep engagements with users, making this area well-suited for gamification.

**From TCS Innovation Labs - Insurance**

TCS Innovation Labs – Insurance has dedicated efforts focused on leveraging the latest technologies to enable insurance companies to do their business faster, better and cheaper.

Some of the key offerings relevant to gamification are:

- Risk Balancer – Gamified Need Analysis
- TCS Virtual Assistant
- Drive Watch - Mobile Telematics Offering
- iPad-based co-creation App
- Risk Analyzer
- iPad-based Illustration Application

While the details of these offerings are not covered in scope of this white paper, we welcome you to contact the Insurance Innovation Lab for additional materials and information on all of these offerings.

The following sections explore in detail how game mechanics have been applied to some of these offerings.

**Risk Balancer Application**

There are certain issues that agents and customers face every time new product is being sold.

First, it’s a challenge for the agent to suggest the exact product to best serve the customer’s unique situation.

Second, customers often either under- or over insure themselves.

Certain customers purchase insurance for almost everything. Believing they are erring on the side of caution, they assume that purchasing insurance will mitigate all their risks and exposures. In the process, they often forget the importance of risk management.

The Risk Balancer application from our Insurance Innovation Lab leverages game techniques to perform needs analysis and educate users on various risks, including how they can be mitigated by opting for a combination of insurance and best practices. It also intuitively guides the user to various insurance products offered by the company and helps them choose which product best suits them. The game also facilitates getting a quote or connecting to an appropriate agent.

The app is like a physics puzzle where the user needs to balance different risks with insurance products and mitigations. The game brings in risk items like “fire” (in the form of boxes) and drops them onto the left side of a seesaw.
The user is then presented with a list of mitigation items and insurance products on the right hand side, and he or she can drag and place them to counterbalance the risks.

In a different implementation, the game can post targeted questions to the user before the risks box falls. For instance, the game posts questions like “Do you have a smoke detector?”. Questions like these will be designed to aid in understanding the insurance needs of the user.

The game also provides the option to customize the mitigation items to real items that the user possesses, so that based on need analysis the user will be in a better position to assess his real life risks and choose insurance products accordingly. The game can also provide notifications about the "premium discounts" which he or she might be eligible for due to the possession of some of the risk mitigation items.

The app has a social sharing feature, which enables users to post their scores or achievements on popular social media platforms like Facebook or Twitter. It also provides a feature that allows users to challenge their friends. You can also accept challenges, and if you perform well, medals are awarded that show your achievements via a profile page.

Figure 5. Illustrates how the gamified risk balancer application balances “fire” risk with mitigations like fire extinguisher and home protection plans. The user can request a quote directly from the application.

Figure 6. Overview of functions performed by Risk Balancer Application
TCS Virtual Assistant

TCS Virtual Assistant solution from Insurance Innovation Lab is a product designed for interactive and engaging customer service.

TCS Virtual Assistant is an avatar-based solution, which assists and guides the users of an application or a web site. It is a programmed interface that quickly identifies the information users are looking for in a given functional context. It can take any form that is a computer generated human model. Driven by artificial intelligence, TCS Virtual Assistant provides automated online assistance. The query from the user can be in the form of text entered on a computer screen or a voice data capture. The voice is converted into text and a search is initiated. The results of the search are collected, sequenced and the closest or most suitable findings are identified. The relevant text is again converted into voice and is spoken by the animated avatar.

TCS Virtual Assistant helps in materializing some of the fundamental rationales of gamification, such as increasing the adoption of applications among users and maintaining interest so that users keep coming back and enjoy using the application. It does so by making the process of engaging with customer service more fun, including notions of play to induce a level of user adoption that might not otherwise occur. AVATARS can dramatically change user-engagement in a gamified application, helping create a stronger bond between user and content.

Insurance companies across the world have been investing substantially in their web strategies to improve customer experience and retention. But all of these efforts have come up short in their ultimate goal of making the web more intuitive and persuasive. The web continues to be “passive” to the end user. The web is an increasingly important part of everyday life, but the only way to make it truly accessible to the vast majority of users is to humanize it. The virtual assistant solution attains this by making the web content active and identifiable to the user. From a new business perspective, avatar can engage in a conversation with the user and perform need analysis intuitively. It can then help the user by suggesting various insurance products offered by the company and subsequently walking them through the web page and helping them get a quote. From a policy servicing perspective, it can help users fill out various complex policy forms by providing a co-browsing experience, and foster the feeling that a real person is helping them do so.

Drive Watch – Mobile Telematics Application

The Drive Watch – Mobile Telematics offering from TCS Insurance Innovation Lab is a cost effective smartphone based telematics solution that rides on an insured’s smartphone. It gives the consumer a value added service backed by important data he may need during his trip, including weather and traffic updates and trip summaries on the front end. At the same time it rewards the user with an appropriately priced, usage based premium plan.

Many aspects of game mechanics have been leveraged in this auto insurance offering.

The application works in the customer’s smartphone and tracks driving characteristics such as acceleration, deceleration, braking and turn intensity by leveraging the phone’s internal accelerometer.
The application self-initializes as soon as the insured starts driving, and begins analyzing the driving parameters. After the journey, the application analyzes the total driving behavior of the driver and provides him a safe driving score and compares his score with other drivers using that application on a relative percentile basis.

If the driving score is better than the fellow drivers using that application, the application will tag the driver as the best driver in the locality and will send the “good driving statistics” to the insurer.

This leverages the “competition” and “challenges” aspect of game mechanics to improve users’ driving skills.

The insurers can make use of the driving data and offer “premium discounts” for safe drivers. The “rewards” in the case of this gamified application are tangible benefits like premium discounts.

This will make more drivers consider the safety of their driving habits.

Users can even share their achievements via popular social media platforms, which further improves adoption rates. Moreover, it improves the popularity of the application and enhances the brand value of the company.

As this strategy matures, the number of claims will reduce over time, as more people will focus on becoming the safest driver in their own locality.

**Conclusion**

Gamification is positioned to play a bigger role in business, and companies have started exploring various opportunities in this area as a means of increasing customer engagement. Understanding how to apply game mechanics plays a crucial role in bringing behavioral changes to user and customer interactions, and is a critical factor in determining the success of gamification initiatives. The opportunities and challenges in applying gamification in insurance are high. Gamification, if applied thoughtfully, can transform the way enterprises do their business. It could change customers into loyal fans and turn employees to self-managers.

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