

Top 10 Trends in Insurance in 2016

What You Need to Know



People matter, results count.

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Introduction

Technology startups are disrupting many existing business models, with significant impact on the insurance industry. Most of the trends in the insurance industry now are either technology related or have technology as one of its drivers. The majority of these trends have low market penetration and will take a few years for mainstream adoption. The Internet of Things has transformational impact on the insurance industry with a potential to transform many parts of the insurance value chain over the next few years.



Big Data, entry of non-traditional firms, and mHealth apps in the insurance industry are also other high-impact trends, which will have significant bearing on both insurers and customers. Non-traditional firms are expected to complement the insurance industry and make its processes efficient across the value chain.

Trends such as the growth of peer-to-peer insurance, cyber insurance, gamification, aerial and digital imagery, and customer adherence apps have a moderate impact, but they will have a larger role to play in the future. As increased innovations occur on these moderate-impact trends, they will help to create new business avenues or provide enhanced customer service.



Trend 01: Increased use of Internet of Things by Insurers

Due to the low cost of sensors, improved communication methods, and increased data processing power, insurers are increasingly leveraging the Internet of Things for various purposes, including identification of customers' needs and risks



Background

- The Internet of Things (IoT) refers to a network of physical objects that contain embedded technology to gather information about specific objects and also has the ability to transmit information
- The data transmitted by IoT can be further analyzed using data processing techniques for useful insights
- In the insurance industry, the Property and Casualty (P&C) line of business was the first to adopt IoT in the form of vehicle telematics
- Other forms of IoT such as connected home technologies and wearables have a slower rate of adoption, but they are expected to have widespread adoption in the future



Key Drivers

- A decline in the cost of sensors, improved communication methods and increased data processing power have enabled the widespread use of the Internet of Things

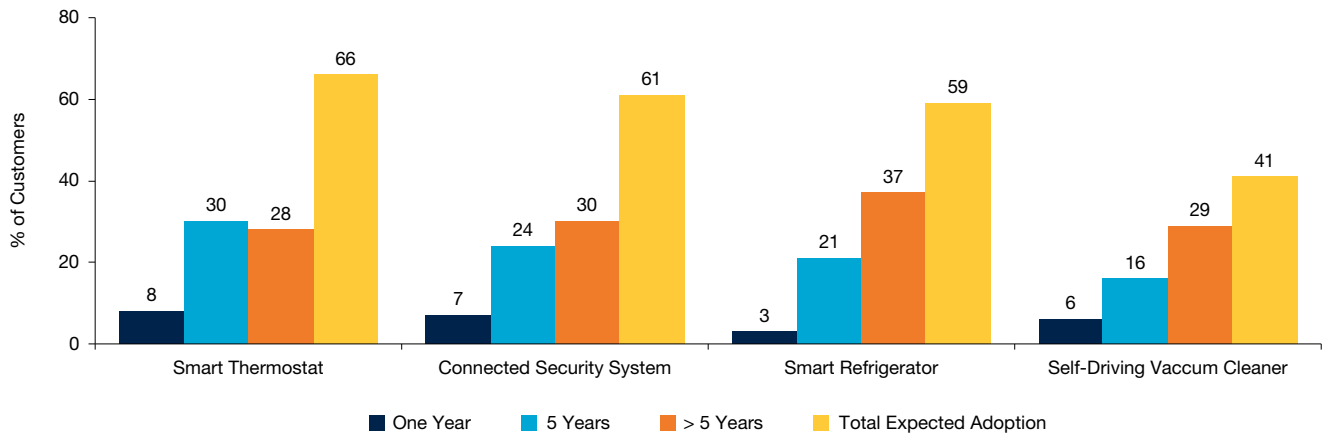


Trend Overview

- The global Internet of Things market is expected to reach \$1.7 trillion in 2020:
 - The number of devices is expected to cross 29.5 billion in the same period¹
- **Connected home technologies** enable people to communicate with electronic devices in their home:
 - The popular connected home technology devices are smart thermostats, connected security systems, smart refrigerators, and self-driving vacuum cleaners
 - The projected adoption rate of connected home technologies is given in Exhibit 1
- **Wearables** refer to electronic devices that can be worn on the body and they can collect and transmit a variety of data about the activity of the people who are wearing them:
 - Though there is a lack of interest for wearable devices in the short term, the long-term growth prospects of wearables are expected to be strong

¹ "Internet of Things Market to Reach \$1.7 Trillion by 2020: IDC", *The Wall Street Journal*, June 2, 2015

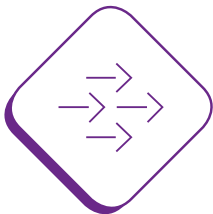
Exhibit 1: Projected Adoption of Connected Home Technologies (%), 2014



Source: "The Internet of Things: The Future of Consumer Adoption", Acquity Group, 2014

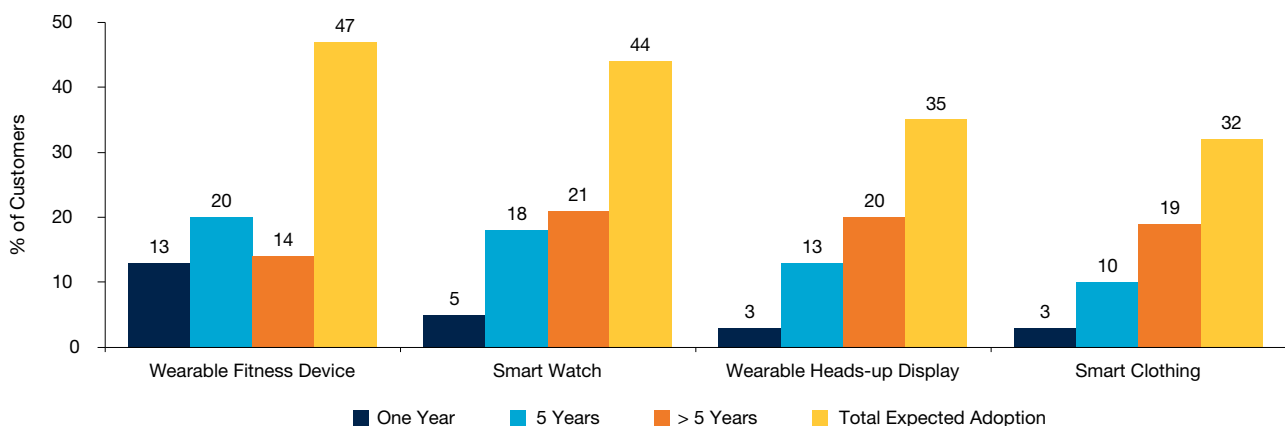
- The projected adoption rate of connected wearable devices is shown in Exhibit 2

Implications



- Using IoT, insurers can closely analyze customers' data and identify their needs and risks
- Customers' health risks can be determined more accurately using wearables
- Policyholder service will transform from being a customer-initiated activity to insurer-initiated activity
- IoT can help in reducing the turn-around time for initiation of claims by tracing the exact location and circumstances responsible for the claim
- IoT sensors can be used as warning systems, which can reduce the frequency and severity of claims

Exhibit 2: Projected Adoption of Wearable Devices by Consumers (%)



Source: Capgemini Financial Services Analysis, 2015; A.T. Kearney Analysis Report, 2014; Text line Searches

Trend 02: Auto-insurers are shifting toward Usage-Based Insurance

Auto-insurers are shifting toward Usage-Based Insurance, which will help them to enhance their claim handling capabilities and enable them to perform better customer segmentation



Background

- Usage-Based Insurance (UBI) implements the concept of writing the premium for auto-insurance based on usage and/or driving behavior
- Vehicle telematics (in-car installed devices to transmit data in real time) is widely used to estimate the usage of a car, including driving pattern and driving behavior



Key Drivers

- Rapid growth of smartphone capabilities including GPS, accelerometers, and g-force tracking, which can enable mobile apps to replace telematic devices
- Increased ownership of connected cars with built-in embedded telematics systems
- Vehicle theft detection systems and other value-added services can be integrated with the telematics system, which aims to increase customer safety



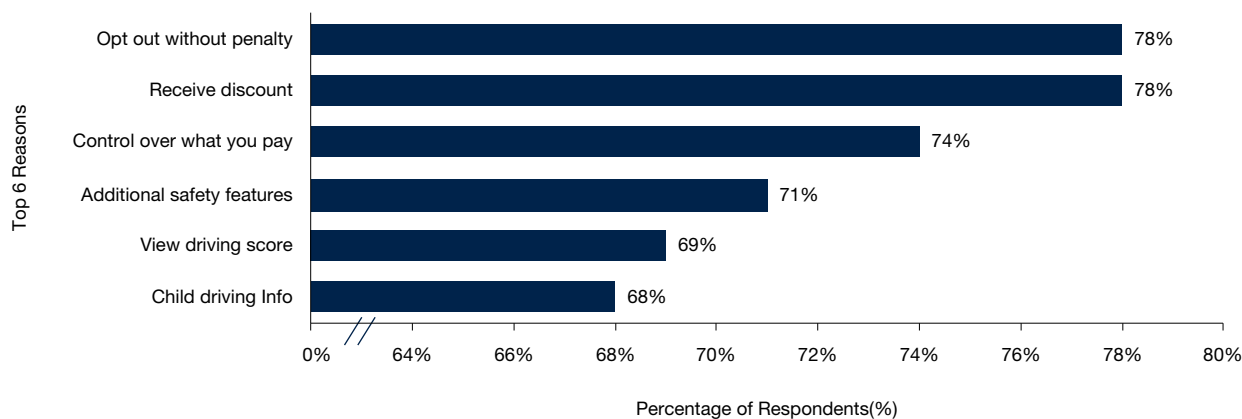
Trend Overview

- Around 36% of auto insurance carriers are expected to use telematics-based UBI by 2020²
- Insurers have tested the concept and started introducing policies in some markets and the adoption is expected to increase over next few years
- Insurance companies are implementing Usage-Based Insurance in two different ways:
 - **Pay-as-you-drive (PAYD)** is low-mileage insurance where the insurance premium is calculated based on the number of miles or kilometers a vehicle has covered
 - **Pay-how-you-drive (PHYD)** is a method of fixing the premium of the customer by assessing their driving style

² "Usage-Based Insurance and Telematics", National Association of Insurance Commissioners, October 8, 2015

- For example, Progressive is giving feedback to drivers using their plug-and-play device, Snapshot, along with their mobile application
- Progressive wrote over \$2.6 billion of premiums in 2014 with customers who were part of their usage-based rating program
- **Manage-how-you-drive (MHYD)** provides guidelines to drivers about best driving practices, leveraging on the data obtained on their driving behavior from telematic devices
- Customers are also interested in UBI, as it offers a lot of benefits to them:
 - Exhibit 3 shows the top six features customers like in UBI

Exhibit 3: Customer Reasons for Interest in UBI (%) – LexisNexis Survey, 2014



Source: Capgemini Financial Services Analysis, 2015; LexisNexis White Paper- Usage-Based Insurance (UBI) Research Results for Consumer and Small Fleet Markets, 2014



Implications

- Insurers can have a better segmentation of risk profiles and enhanced claim handling capabilities
- New direct insurance startups serving customers entirely through mobile or online touch points will emerge
- Insurance companies may partner with carmakers to install customized telematic devices at the time of production

Trend 03: Using Big Data to Improve Claim Processing Capabilities

Insurers are acquiring data from various sources, including social media, and gathering insights, which can be used to make claims processing faster and eliminate fraud



Background

- Big Data is defined as high-volume, high-velocity, and high-variety information assets that provide new insights and enable better decision making, leveraging innovative data processing techniques
- With an increase in customer touch points, especially through social media, insurers are getting a lot of data in various formats, which can be processed for meaningful insights



Key Drivers

- Customers are expecting a quick and smooth claims processing process
- Insurers have to take proactive steps to combat fraudulent claims



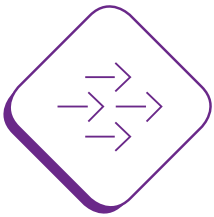
Trend Overview

- Big Data analytics can help in the following ways to improve claims processing:
 - Big Data enables insurance companies to identify and report events in a fast and effective way
 - Claim assessment activity can now be automatically assigned based on the performance of the adjuster and complexity of the claim
 - It is generally difficult for the carriers to assess the loss when a claim is first reported, but analytics makes it easier to calculate and reassess the loss reserve
 - Fraud can be minimized through predictive analysis using Big Data analytics
- Insurance companies can efficiently execute the subrogation and settlement process, which was a challenge due to the huge amount of data

- For example, Celina Insurance had an internal Excel-based tool, which was weak in terms of modeling capabilities:
 - They observed losses in risk pricing and claims fraud detection and decided to implement predictive analytics with machine learning to analyze large volumes of data to identify inter-relationships between various risk attributes
 - With this new tool, they had improvement in loss ratio

Implications

- Insurance firms have to improve their data storage and processing capabilities
- Firms should pick data from the right sources, as some data may be unimportant and could be misleading
- Firms will need to be proactive in trying out new models and tools, as old tools may not be the most efficient in handling new formats of data
- Big Data capability not only means possessing the technology, but also having the right set of human resources, who can enable firms to use the data and tools more effectively (e.g., the role of data scientist is crucial in deriving insights from data)



Trend 04: Entry of Non-Traditional Firms in Insurance

Non-traditional firms can leverage their data mining power, huge customer base, and capital availability in the insurance business and they are entering into the industry with partnerships, alliances, joint ventures and acquisitions



Background

- Technology, retail, e-commerce, and non-banking financial institutions are entering into the different parts of the insurance value chain in all insurance segments
- Firms such as Google, Walmart, and Amazon have access to a vast customer database and are successful in their business models and have a huge capital base



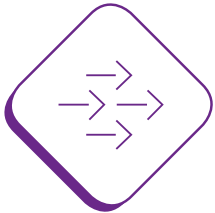
Key Drivers

- Non-traditional firms with Big Data processing capabilities, a huge customer base, significant brand presence, and large capital base, want to leverage their expertise and enter into the insurance industry



Trend Overview

- The new entrants are primarily focusing on the distribution portion of P&C and health insurance:
 - For example, Google and Walmart have partnered with comparison sites to offer auto insurance in the U.S.
- Google launched an online insurance comparison site in the U.K. in 2012 and it is entering into the insurance e-commerce market in the U.S. in 2015:
 - Google Compare for Auto Insurance is a comparison-shopping site that lets users compare rates from different insurance providers
 - Google's insurance partners include Mercury Insurance and MetLife, as well as local providers
- IKEA has started selling insurance products in the healthcare segment for children and pregnant women:
 - Ikano Forsakring, a Luxembourg-based insurance company, in collaboration with IKEA, has developed Omifall pregnancy and child insurance
 - IKEA has rolled out trial products for a range of policies at selected stores, with a plan to target 2.5 million members of the company's loyalty club in Sweden



- Non-traditional firms are entering the insurance value chain through partnership and alliances (e.g., Walmart with Autoinsurance.com), joint ventures (Magma Fincorp with HDI-Gerling), and acquisitions (Google acquiring BeatThatQuote):
 - Around 90% of insurance executives have an opinion that insurance companies will have alliances with non-traditional organizations to improve distribution³
 - By partnering with firms, the new entrants acquire knowledge of insurance industry aspects such as product pricing, customer behavior, and customer product preferences, which will enable them to understand the dynamics of the industry
- New entrants are expected to face challenges on the regulations front, as the insurance industry is more highly regulated than the current businesses in which they are operating
- New entrants will also have to scale up to improve their efficiency to be on par with the established insurance firms
- Since the majority of the non-traditional firms are having a global presence, the trend is expected to be adopted globally

Implications

- Because of the entry of new players, competition will increase in the market
- The smaller insurance firms will be impacted the most, as they will not be able to scale up their technology infrastructure and competency to cope up with the entry of technology giants
- Customers will benefit from the increased competition in the industry, which will force companies to provide a better customer experience

³ "Can Amazon Dominate in Insurance, Too?", Sathyanarayanan Sethuraman, Insurance Thought Leadership, February 13, 2014

Trend 05: Increased Use of Aerial and Digital Imagery

Insurers have started to use aerial and digital imagery for assessing property, which will enable them to do quicker claims processing



Background

- Aerial and digital imagery utilizes digital images and software to view properties and land, and estimate their size, location, damages incurred, and proximity to identified risks
- Recent technological advancements on aerial imaging enable insurers to capture high-resolution 2D and 3D images of land and property, which can be processed by advanced software

Key Drivers

- For estimating damages and losses, insurers have to physically visit the event site, which is time consuming and labor-intensive
- In some cases, civil authorities may restrict physical examination in a zone for safety reasons
- After a catastrophe, certain locations may not be accessible for physical visits, which will delay the claims estimation process
- There is a need for quicker and accurate estimation of damages before claims processing



Trend Overview

- Aerial and digital imagery can be used by insurance companies for seamless data management, avoiding risks, providing a quick response to catastrophe events, and detecting fraud:
 - The global Unmanned Aerial Vehicle (UAV) market is expected to grow at a faster rate, and by 2023 it is estimated to reach \$114.7 billion in aggregate⁴
- Usage of aerial and digital imagery has its origins in the U.S., and now there are many firms that provide this service:
 - There are a few players in Canada who provide this service
 - There are no notable players outside North America for providing this service
 - In the near future, the trend may be widely adopted in North America, but in other geographic areas the chances of insurers adopting this technology will be very low



⁴ "Unmanned Aerial Vehicle (UAV) Market to Reach US\$ 114.7 Billion by 2023", Satellite Markets & Research, February 13, 2014

- Aerial and digital imagery reduces the cost of insurance companies processing claims:
 - A leading insurer conducted an experiment to test the effectiveness of unmanned aerial vehicles. While the adjusters were more likely to over-measure 79% of the time, Unmanned Aerial Vehicles assessed the properties with greater accuracy. The carrier would have overpaid \$338 per claim if they had not used UAVs
 - Federal crop insurance lost around \$117 million in a year because of waste, fraud, and abuse. This can be prevented if the land is surveyed using aerial and digital imagery
- Though aerial and digital imagery has a lot of benefits, it also has a few challenges for its implementation:
 - Regulatory approvals for drones have to be obtained from local authorities for capturing the images
 - Operator safety is a major concern if the drone is being operated from an unsafe area
 - Public safety may be disturbed, as drones can hit people or buildings and they could become a distraction for motorists
 - Property access rights may be violated if drones cross a private or restricted area

Implications

- The benefits associated with aerial and digital imagery have a huge potential to become a primary tool for insurers to assess properties
- Insurers can look for alliances with professional firms to provide these services, for example, Pictometry has partnered with a reputed insurance firm in the U.S. and GooseView technologies is providing an array of services
- Data storage and processing capabilities will need to be enhanced to accommodate and process images



Trend 06: Focus on Gamification of Processes

Insurers are applying gamification to simplify complex and tedious processes to enhance the customer experience and make internal training more effective



Background

- Gamification uses game mechanics such as points, challenges, leader boards, and incentives in real-life scenarios to motivate the audience to higher and more meaningful levels of engagement



Key Drivers

- Improving customer engagement and loyalty is one of the primary concerns for the insurance industry in the era of increased competition
- Better customer engagement will also enable insurance companies to better assess their customers' risk profile
- The game mechanics has primary and secondary impact on human emotions, and they can be leveraged to provide better customer experience

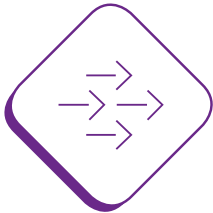


Trend Overview

- Gamification is an emerging trend in many markets and is becoming an integral part of insurer marketing campaigns
- Around 63% of people feel that it is fun and rewarding to have the routine activities in the form of a game⁵
- Insurers are increasingly leveraging various areas of impact of gamification in different combinations for improving customer experience:
 - Achievements act as a motivation for playing for a longer time, which is useful for insurers to gather more information on customer behavior
 - The element of surprise and mystery motivates the player to explore more options, even if the player is losing the game
 - Fame, rewards, and challenges are other motivating factors leading to the success of the game

⁵ "Gamification in Insurance: Customer Engagement and Beyond", Anthony R. O'Donnell, Insurance Innovation Reporter, July 24, 2014

- Gamification can be used to educate people about various insurance policies:
 - AXA launched a game in Indonesia (where less than 2% of the people have insurance). The game was played by 30,000 unique players and AXA website had 225,000 visits in five weeks⁶
- Gamification can also be employed internally to motivate and train employees
- Progressive has developed games for both employee training and customer education about safe driving:
 - In the game named “Special Investigation Unit”, the player becomes a special investigation unit agent and helps to solve an insurance fraud case. This game is used by Progressive to educate its internal team on claims fraud detection
 - In the game “Route-Rageous!”, the players have to drive safe abiding traffic-rules and avoiding collision with other vehicles. This game improves the driving behavior of customers and reduces the chances for accidents



Implications

- Insurers can simplify complicated and tedious processes using gamification:
 - For example, policy discounts can be easily explained through gamification techniques
 - Gen-X and Gen-Y customers can be targeted, as they are more attracted by games
- Employee engagement activities like training, performance monitoring, and bonus structure, and customer engagement activities can be made interesting using gamification:
 - This will improve productivity of employees and profitability of the firm

⁶ Gamification case study: AXA online game educates customers on insurance fund", digitaltrainingacademy.com, accessed December 2015 at http://www.digitaltrainingacademy.com/casestudies/2015/03/gamification_case_study_axa_online_game_educates_customers_on_insurance_fund.php

Trend 07: Increasing Demand for Cyber Insurance

As more businesses want to protect themselves from unforeseen cyber attacks, the demand for cyber insurance is increasing and it is expected that cyber insurance may become a default choice for many companies



Background

- Though companies have an information security division and several best practices to prevent cyber crime, it is impossible to ensure complete protection from cyber crimes:
 - This is due to non-availability of sound technical solutions, vulnerable security products, problems in implementing security solutions, and human errors



Key Drivers

- Since complete elimination of cyber risk is not possible, the second best option for businesses is to transfer the cyber risk for a premium
- Some insurance companies provide value-added services, which can help businesses prevent/handle a cyber attack



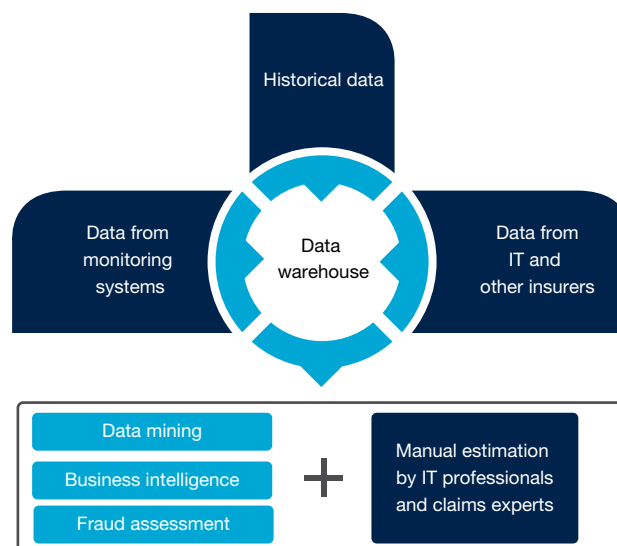
Trend Overview

- Cyber risk has been termed as a potential global threat by the World Economic Forum:
 - The global financial impact of cyber crime is estimated to be around \$575 billion⁷
- The increase in cyber threats are the prime reason for the current need of cyber insurance:
 - Though cyber insurance has been available for over ten years, it was not widely adopted due to lack of data, lack of awareness among users and legal hurdles
 - Most of the cyber insurance premium volumes cover the U.S. and the adoption in other parts of the globe is relatively low
- The various damages that are covered under cyber insurance are intellectual property theft, business interruption, data and software loss, cyber extortion, cyber crime/ cyber fraud, breach of privacy event, network failure liability, impact on reputation, and physical asset damage

⁷ Cyber Risk Insurance Market Outlook With AIG, ACE Ltd, Chubb Corp., Zurich Insurance Co. Ltd, Marsh and Beazley Group Ltd., PR Newswire, November 18, 2015

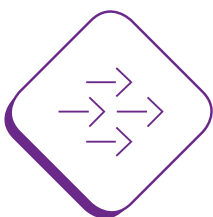
- Cyber attacks are severe and will have a big impact on organizations:
 - The data breaches at Sony resulted in account data on close to 100 million individuals becoming exposed and over 12 million credit and debit cards being compromised
 - Sony estimated that it had to spend close to \$180 million for breach-related costs in the following year⁸
 - If Sony had purchased a cyber insurance policy, some part of the loss would have been shared by the insurance company
- For estimating losses, insurance companies are using stress test logic and traditional methods
- The procedure of estimating losses using traditional method is shown in Exhibit 4

Exhibit 4: Estimating Losses Using Traditional Method



Source: Using Insurance to Mitigate Cybercrime Risk, Capgemini, 2012

Implications



- Cyber insurance will have its impact across various touch points in the insurance value chain:
 - Insurance providers have to understand the nature of business and local regulations while designing the product
 - Insurers can integrate cyber insurance products to the existing core systems
 - In the policy administration and underwriting phase, insurers have to study the potential impact of a cyber attack to determine pricing

⁸ Zurich lawsuit against Sony highlights cyber insurance shortcomings", Jaikumar Vijayan, accessed December 2015 at <http://www.computerworld.com/article/2509419/disaster-recovery/zurich-lawsuit-against-sony-highlights-cyber-insurance-shortcomings.html>

Trend 08: Emergence of Peer-to-Peer Insurance

Peer-to-peer insurance is an emerging concept, which can provide insurance at low cost. If this model is widely adopted, established insurance firms will face tough competition



Background

- The peer-to-peer insurance business model teams up individuals who agree to pool their insurance premiums, with losses compensated using the pooled money. The left-over money is again divided among the individuals
- The peer-to-peer concept is an emerging concept with very few players in the insurance industry in the U.S., U.K. and Europe



Key Drivers

- If the cost of insurance is reduced, many uninsured people will buy an insurance policy
- Customers want speedy claims processing



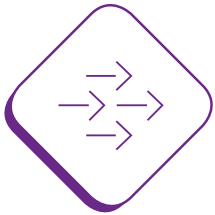
Trend Overview

- The peer-to-peer insurance model is expected to gather widespread adoption in emerging as well as mature markets:
 - In emerging markets, the reduced premium cost will be an incentive for adopting the peer-to-peer insurance model
 - In mature markets, good Internet connectivity and commoditized insurance product lines will be key drivers to adopt the peer-to-peer insurance model
- In peer-to-peer insurance, the cost of insurance is reduced by the following ways:
 - It is expected that there will be a drop in fraud because everyone is connected socially and it can reduce the premium paid by the policyholder
 - Policyholders will use their private information to decide whom to connect with, rejecting bad risk profiles
 - There can be a reduction in process costs because the small risks will be handled using the network's payback
 - The cost of sales for the business model can be reduced because of its ability to onboard new customers through the customer's network
 - The administration cost will also decline because of the expected reduction in the number of sales agents and better risk profiles

- Founded in 2010, Friendsurance provides household, personal liability, and legal expenses insurance based on a peer-to-peer insurance model:
 - In Friendsurance, major savings are achieved in sales cost
 - The amount left over after processing the claims are split among the policyholders

Implications

- If the peer-to-peer insurance model is adopted by individuals on a larger scale, it will become big competition to established insurance players
- Traditional insurers can be proactive in establishing relationships with peer-to-peer insurance firms, as they are dependent on other insurance firms for larger claims
- Traditional insurers can also check the possibility of implementing peer-to-peer business models along with their core business model



Trend 09: Usage of mHealth Apps by Insurers

Insurers are focusing on mHealth apps, as they can monitor and improve the health of customers, thereby reducing their healthcare spending and the data from the apps will enable insurance companies to understand a customer's risk profile



Background

- mHealth is a high-level term for mobile phone applications and other wireless devices associated with healthcare
- The most common applications of mHealth are prevention of diseases, health monitoring, support for treatment, and chronic disease management
- The key determinants of a person's health are lifestyle, environment, and hereditary factors:
 - If the determinants can be observed and analyzed, we can predict how likely that person will get affected by a disease and the required preventive measures can be taken



Key Drivers

- Information asymmetry exists in the health insurance sector, as insurers cannot determine the health condition of customers accurately
- With the advent of mobile and wireless technology, close monitoring of a person's health and their surroundings is easier than before
- With the high adoption rate of mobile technology, implementing mHealth will be an easier task

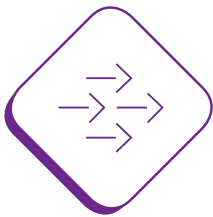


Trend Overview

- mHealth is a widely appreciated and accepted concept among people with the number of healthcare apps published in 2014 crossing 100,000:
 - The market revenue of mHealth apps is estimated to reach around \$26 billion in 2017⁹
 - The U.S. tops the mHealth market with a greater number of apps being developed for Apple App Store and Google Play Store
 - All the countries with good Internet connection are expected to witness a wide adoption of mHealth apps

⁹ "mHealth App Developer Economics 2014", research2guidance, May 6, 2014

- For insurers, mHealth will be of great use, as a patient's risk profile can be judged easily at an earlier stage:
 - If consumers are healthy, the claims from them will be greatly reduced
 - If spreading of diseases is monitored and controlled, insurance companies will be directly benefited due to reduction in claims
- mHealth can also reduce administrative costs of health insurers to a great extent:
 - As they have all the data about their customers with them, pulling data during policy renewals or new policy acquisitions is easier
- The companies can cross-sell specific insurance policies to their customers based on their health data
- Insurers are concentrating more on mHealth, as they can reduce the healthcare spend of their customers
- Many insurance players have launched their own mHealth apps, with some companies launching multiple apps:
 - For example, Humana has released four apps, each for a specialized purpose



Implications

- With the costs of healthcare rising, health insurance companies have to adopt novel methods to bring down the cost of healthcare:
 - Using mHealth apps, customers can maintain a healthy life with lower healthcare spending
 - This will be a win-win situation for insurers and customers
- With mHealth apps, new set of data will be generated and insurers have to scale up their data storage and processing capabilities to derive useful insights

Trend 10: Focus on Customer Adherence Apps

Non-adherence to proper medication will increase the healthcare spending of customers and so insurers are focusing on customer adherence apps, which will improve patients' adherence toward medication



Background

- Patient adherence to medicine and treatment is still a challenge in the healthcare industry:
 - For conditions such as depression, the adherence rate is as low as 50%¹⁰
- Customer adherence apps are mobile apps that help customers to regularly follow their medication and treatments through reminders and games



Key Drivers

- Increased healthcare spending of customers, because of non-adherence to proper medication
- With the high adoption rate of mobile technology, implementing customer adherence apps will be an easier task



Trend Overview

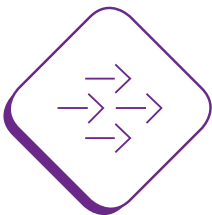
- The reasons for non-adherence to a medical treatment include inadequate knowledge of the treatment, misunderstanding of prescriptions, forgetfulness, and lack of social support during the period of illness
- Customer adherence apps will help patients to overcome the above-mentioned factors and make the patient more adherent to their medication schedule
- Customer adherence apps are mainly developed for Apple, Android and BlackBerry operating systems:
 - More apps are developed for the Android operating system
 - The Apple operating system has apps with more advanced features than the other two operating systems
 - Many apps are expected to be developed in the future, until the market consolidates with a few apps that have the majority of market share
 - With a large number of benefits associated with the app, it is expected to be adopted widely in the regions with high smartphone penetration and good Internet connectivity

¹⁰ Patient Adherence: The Next Frontier in Patient Care", Suday Karkera, Lubomir Merkov, Deepankar Nayak, Taweechai Qunfoong, 2011, Capgemini, accessed December 2015 at https://www.capgemini.com/resource-file-access/resource/pdf/Patient_Adherence_The_Next_Frontier_in_Patient_Care.pdf

- The commonly adopted adherence techniques can be grouped under five categories based on the objective. The objective of the app may be to:
 - **Remind** the patient about their medication in a timely and unobtrusive manner
 - **Counsel** patients who often miss their medication to find the root cause for non-adherence and fix it
 - **Reinforce** the need to follow a proper medication schedule
 - **Educate** patients about their disease and the drugs, and more importantly, the side-effects if proper medication is not followed
 - **Simplify** the dosages, so that a patient is not confused about the drug pattern
- The various adherence techniques can be adopted easily through mobile applications:
 - For example, Patient Partner is a mobile app that educates patients about clinical outcomes, if they are not adhering to a medication schedule
 - Vera, an app from Reflection Health, improves patient adherence to their physical therapy exercises
- Apps can also integrate gamification techniques, which will create more interest among patients for following the medication schedule properly:
 - Cohero is a medication app that automatically tracks medications with sensors and rewards patients for proper medication in a gamified interface

Implications

- Customer adherence apps will be of great value to health insurers:
 - It will reduce customer healthcare spending
 - Insurers can give incentives to patients who follow their medication correctly
- As the apps are handling sensitive customer information, the data has to be stored/ processed in accordance with local regulations
- The apps can be targeted based on age group and interests so that people may use them with ease



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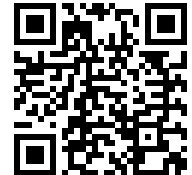


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