Top 10 Trends in Insurance in 2017

What You Need to Know

Table of Contents

Introduction

The insurance industry is witnessing a slow but certain evolution and the two key forces driving this are connected technologies and data analytics. The Internet of Things (IoT) has moved beyond hype to actual use cases being explored by insurers, especially in the smart home space. IoT and data analytics are slowly driving a shift toward a focus on proactive risk management and risk mitigation, even in personal lines. Mobile apps, especially, are being extensively leveraged by insurers across business lines to help customers better manage their health, lifestyle, or property, thus creating a win-win situation by enhancing customer experience as well as lowering claims costs.

Insurers' operating and business models are evolving, driven by trends such as a disaggregation of the insurance value chain, new product opportunities emerging from the sharing economy, and the trend of insurers providing value-added services as a means to differentiate their companies in a competitive market. Insurance distribution is being redefined by new technologies such as chatbots, digital tools that are creating greater market transparency and competition, and growth of direct channels in the small business market. The stream of new technologies finding applications in the insurance industry is also increasing every day. Blockchain, Artificial Intelligence (AI) and Robotic Process Automation (RPA) are some of the key areas that have significant potential to streamline insurers' operations while enhancing customer experience. Likewise, augmented reality is being explored for applications beyond marketing in insurance.

Trend 01: Use of Automation and Artificial Intelligence in Insurance

Insurers are increasingly exploring automation of business processes across the value chain and developing Artificial Intelligence (AI) applications such as robo-advisors

Background

- For years, insurers have been automating various business processes that are repetitive and require less decision-making skills across the value chain
- Industry focus is shifting toward exploring automation of more complex and risky processes
- Back-office tasks are automated by various techniques such as artificial intelligence, machine learning, computer vision, and natural language classification, and property assessment is automated using drones

Key Drivers

- Emerging technologies such as artificial intelligence and machine learning provide scope for intelligent automation
- The huge volumes of data generated by IoT and wearables require intelligent automation for analysis
- Property assessment and claims estimation can be done quickly and efficiently using drones
- Automation will reduce the cost of operations and process time
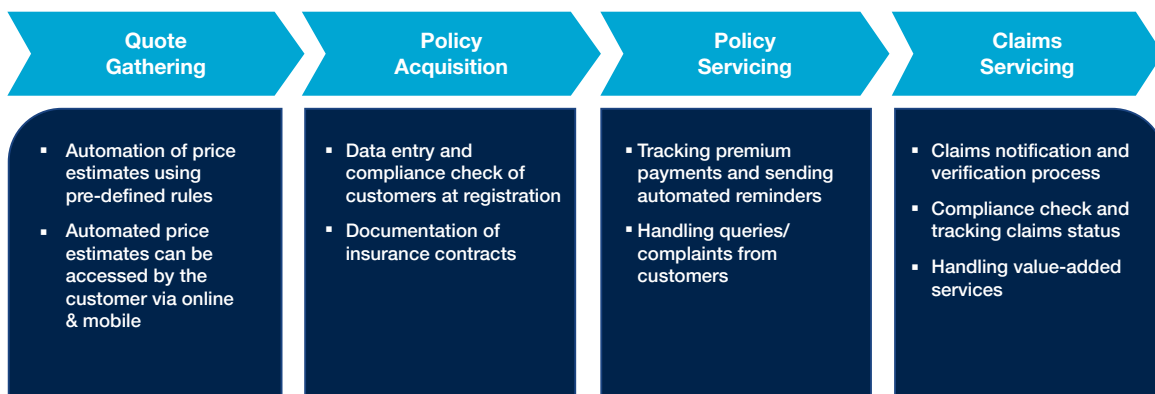
Trend Overview

- With the rise of intelligent systems, insurers have started automating more complex processes:
    - For years, only simple processes that require low decision-making skills such as data entry, compliance checks, standard customer communications, and managing rule-based decisions, were automated
    - With the emergence of intelligent systems, insurers are exploring the automation of property assessment, receiving customer insights, personalized customer interactions, fraud detection, and claims verification and processing
- Property and Casualty (P&C) insurers have started employing drones for automated property assessment and claims processing:
    - Aerial digital images captured by drones help in quicker and more accurate property assessment
    - Drones are also helpful where property assessment becomes risky, such as roof tops of taller buildings, and properties that are not easily accessible by humans
    - Drones are employed to assess property damage during a catastrophe and initiate claims processing in a shorter span of time
    - Four insurance companies, including AIG and USAA, have received Federal Aviation Administration approval for testing drones for commercial purposes[1]

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[1] "Insurers Flying High", Steve Yahn, *Risk & Insurance*, April 16, 2015, accessed October 2016 at http://www.riskandinsurance.com/insurers-flying-high/

- Personalized customer interactions, such as chatbots, resolve customer queries with man-machine interactions (chatbots are discussed in detail in Trend 02: Insurance Distribution Is Being Redefined)
- The sources to tap customer data are increasing at a faster pace and customer insights from this large volume of data can be generated only by using advanced analytics and machine learning techniques:
  – Life and health insurance companies rely upon machine learning to generate insights from the near real-time data from wearable devices
- Better customer insights are generated by analyzing large volumes of data from various sources including social media, by leveraging artificial intelligence techniques
- Artificial intelligence can also be used in fraud detection, as data from a greater number of sources can be used for analysis as a result of improved data processing and self-learning capabilities

Exhibit 1: Automation of Business Processes across the Value Chain

Quote Gathering	Policy Acquisition	Policy Servicing	Claims Servicing
▪ Automation of price estimates using pre-defined rules ▪ Automated price estimates can be accessed by the customer via online & mobile	▪ Data entry and compliance check of customers at registration ▪ Documentation of insurance contracts	▪ Tracking premium payments and sending automated reminders ▪ Handling queries/ complaints from customers	▪ Claims notification and verification process ▪ Compliance check and tracking claims status ▪ Handling value-added services

Source: Capgemini Financial Services Analysis, 2016

Implications

- A wide range of back-office functions can be automated (see Exhibit 1) allowing a firm to focus on improving front-office services
- Customer experience can be enhanced with quicker, transparent, and error-free transactions
- Automation and AI can provide insurers with more advanced processing capabilities, as well as lower costs through streamlined operations
- Firms should enhance their technology infrastructure and skill set to implement various automation techniques
- Firms should also standardize data across the value chain, so that various automation systems can communicate seamlessly
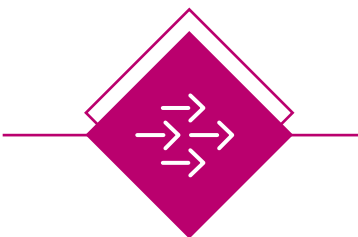
Trend 02: Insurance Distribution Is Being Redefined

Insurance distribution is being redefined due to tools creating greater market transparency and new channels such as direct small business insurance and chatbots

Background

- The new channels of insurance distribution such as online research platforms and chatbots are growing fast and are disrupting insurance distribution systems
- There is also an increase in the number of direct channels and online comparison tools for the small business insurance market

Key Drivers

- The key driver for the growth of direct small business insurance is their ability to distribute insurance policies in a cost-effective manner, as it combines various risks of the small business, to a large audience pool
- Chatbots use artificial intelligence to deploy distribution and claims servicing to provide superior customer service, demonstrating the potential to replace human agents

Trend Overview

- The new direct distribution channels and online comparison platforms for direct small business insurance are likely to ramp up over the next few years similar to the trend in personal lines:
  - Direct channels are slowly gaining popularity in the small business market
  - Allstate has debuted a hi-tech business insurance quoting platform which allows small business owners to buy a policy in about five minutes and it is expected to boost their online direct sales[2]
  - Examples from InsurTech include Gather, a P2P insurance platform for small businesses that empowers business communities to self-insure and coverage is offered through a captive which is owned by the businesses it insures[3]
  - Other InsurTech firms include Next Insurance which provides an online solution for small business owners and CoverWallet which aims to leverage data, design, and technology to provide a better experience to more than an estimated 20 million underserved small businesses in the United States[4]

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[2] Could Allstate's '5 Minute' Small Business Policy Transform Commercial Lines Sales?", Andrew G. Simpson, Insurance Journal, October 19, 2016, accessed November 2016 at http://www.insurancejournal.com/news/national/2016/10/19/429725.htm

[3] "80 Hottest InsuranceTech Companies Shaking up the Trillion-Dollar Insurance Industry", Sofia, Let's Talk Payments, March 9, 2016, accessed November 2016 at https://letstalkpayments.com/80-hottest-insurancetech-companies-shaking-up-the-trillion-dollar-insurance-industry/

[4] "2 Instech Startups Target Small Business Insurance Market", Andrew G. Simpson, Insurance Journal, March 15, 2016, accessed November 2016 at http://www.insurancejournal.com/news/national/2016/03/15/401799.htm

Exhibit 2: New Insurance Distribution Channels
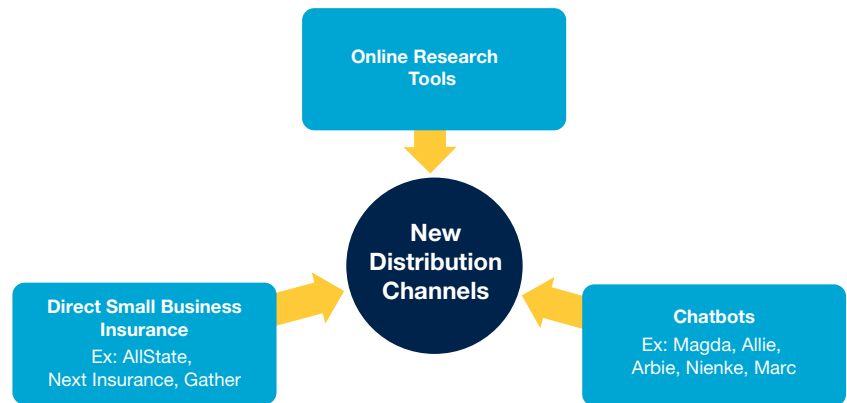
Source: Capgemini Financial Services Analysis, 2016

- Chatbot is a computer software program that can communicate with humans using artificial intelligence—the technology has evolved to the extent that customers do not even realize they are talking to a computer program:
  - Insurers such as Allianz (Allie), Link4 (Magda), RBC (Arbie), NN (Nienke), Credit Agricole (Marc) have introduced chatbots to provide human-like experience to their customers while attaining greater cost benefits in customer servicing[5]

Implications
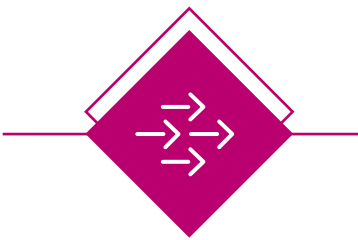
- Online insurance sales may increase in future with commercial lines such as small business insurance contributing to the overall sales due to the growth in direct channels in these lines
- Insurance customers will be benefitted with the changing market dynamics and increase in market transparency due to the proliferation of online research tools
- Chatbots can help insurers reduce their costs and provide superior experience to customers

[5] "Chatbot & The Rise of the Automated Insurance Agent", Rick Huckstep, The Digital Insurer, April 27, 2016, accessed October 2016 at http://www.the-digital-insurer.com/blog/insurtech-the-rise-of-the-automated-insurance-agent-aka-the-insurtech-chatbot/

Trend 03: Changing Market Dynamics due to Value Chain Disaggregation

Value chain disaggregation is creating new InsurTech partnership opportunities and a greater need for customer engagement

Background

- Value chain disaggregation refers to the emergence of firms that offer products and services only for specific parts of the insurance value chain
- This creates a fragmented value chain where customers may interact with multiple players as opposed to interacting with a single vertically integrated player

Key Drivers

- The key drivers for value chain disaggregation include:
  - The emergence of numerous InsurTech firms with innovative offerings for specific functionalities or parts of the value chain
  - Customer demand for greater transparency, convenience, and personalization, leading to popularity of platforms that aggregate information from multiple insurance firms
  - The ease provided by a Plug-and-Play system for exploring new technology capabilities, especially for incumbent firms restrained by legacy systems and processes

Trend Overview

- A range of firms are emerging who provide innovative offerings for specific parts of the insurance value chain
- While many of these are geared towards providing a customer interface with a unique value proposition, some firms provide specialized analytics-based software solutions to insurers
- The **Distribution** portion of the insurance value chain is seeing the entry of marketplace platforms that create an additional intermediate layer between insurers and customers:
  - Insurify provides smarter, easier car insurance comparison and gives customers customized suggestions and recommendations based on their unique needs and preferences by using artificial intelligence
  - Cover provides a mobile-first solution to quickly and easily get a price quote for insurance coverage—using the Cover app for iOS or Android, users simply take a photo of the property they want insured
  - PolicyGenius is an online insurance platform—through its highly tailored Insurance Checkup™, users can discover their coverage gaps and read about solutions for their exact needs
  - Friendsurance enables customers to form social networks that pool premiums together and the pooled premiums are used to pay the deductible portion of the claims expense

**Exhibit 3: InsurTech Players in Insurance Value Chain**
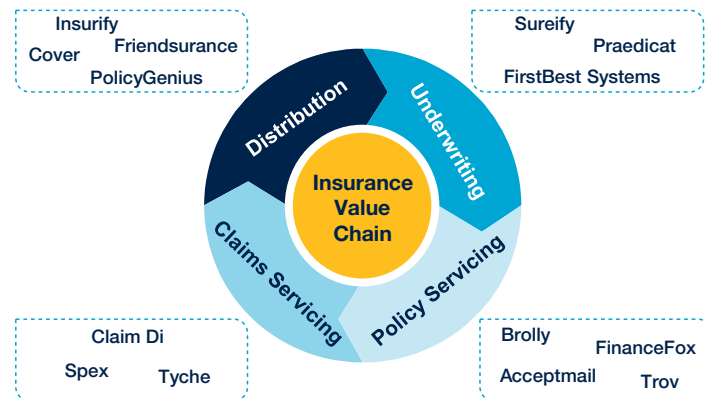
Source: Capgemini Financial Services Analysis, 2016

- In **Underwriting**, firms are developing specific solutions that can be used by carriers for improving their underwriting performance:
  – Force Diagnostics is focused on using a combination of science and a streamlined customer-centric process to transform health and wellness screening for life insurance
  – Sureify provides insurers with the Lifetime Platform which is a cloud-based insurance platform for insurers to configure their products and engage with users through multiple channels such as web, mobile, and other connected devices
  – Praedicat provides multiple tools for underwriting by drawing information from scientific literature for emerging risk identification, underwriting, and management of risk
  – FirstBest Systems' Underwriting Management System (FirstBest UMS®) provides an underwriting workstation that consolidates tools, risk information, and third-party data and reports to enable faster risk assessment decisions for underwriters and producers
- In **Policy Servicing**, firms are offering apps that provide customers a consolidated view of all their policies or assets and enable specific functionalities such as premium payments:
  – Acceptmail provides a web-based payment tool that allows users to pay their premiums online, allowing users to set up automatic payments and schedule their payments for frequent, recurring bills
  – Brolly and FinanceFox provide apps that enable users to view and manage all their policies in a single application and also provide recommendations on missing coverage
  – Trov's app allows customers to organize information on their assets and back the information up to the cloud so as to be accessed whenever required
- In the **Claims** portion of the value chain, specialized offerings include claims reporting apps for customers and claims handling or fraud detection software for insurers:
  – Claim Di is a mobile app that connects drivers with their car insurance companies. In case of an accident or need for roadside assistance, a customer can simply use the Claim Di app to notify the insurance company, document the accident, and get a surveyor to the site immediately

– Spex provides tools to capture and document claims inspections and access claims data, thus making claims handling more efficient for field representatives and customers alike
– Tyche helps insurers manage disputed claims by aggregating data from various sources to build predictive models and insights into legal risk
– Shift Technology uses artificial intelligence for claims fraud detection and also recommends on steps to investigate a specific claim

Implications
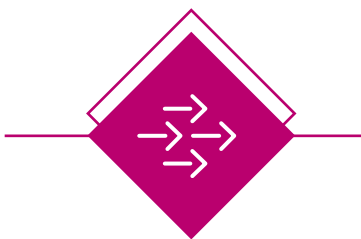
- As the insurance value chain disaggregates, customers may shift to aggregated one-stop platforms to buy and manage their policies, thus leading to lesser control on the customer relationship for insurers
- This has the potential to dilute brand loyalty and increase competition, driving a need for greater focus on customer retention through innovative engagement
- The new ecosystem of players makes it imperative for insurers to develop the right partnerships and integrate with multiple partners
- It also offers insurers opportunities to explore new capabilities without making large in-house investments or being restrained by legacy systems
- The trend of value chain disaggregation may lead to more focused specialization by insurers on their core competencies while outsourcing other activities
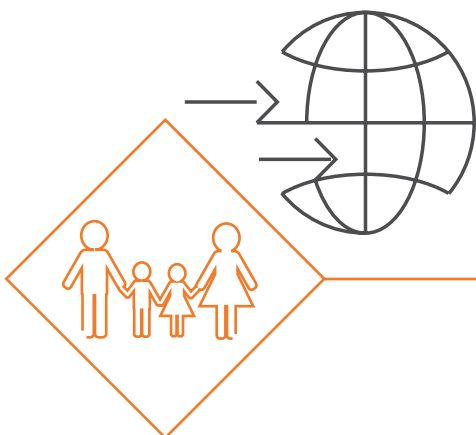
Trend 04: New Products for the Sharing Economy

New products are being designed by insurers that cater to the unique needs emerging from the sharing economy

Background

- The sharing economy is an economic system where users source assets or services as per need from a common set of providers and essentially, share the underlying assets with other users
- For example, companies such as Uber and Zipcar enable ride sharing, whereas companies such as AirBnB provide an online marketplace to match hosts and guests for short-term accommodation
- The sharing economy has emerged as a fallout of the platform economy and is driven by increasingly dynamic customer lifestyles

Key Drivers

- The shift toward a sharing economy is bringing forth many complex situations that are typically excluded or not accounted for in traditional insurance products
- Insurers can tap this sizeable and growing market by designing products that cater to the unique needs of the sharing economy

Trend Overview

- Insurers are increasingly exploring development of new products for the sharing economy
- In auto insurance, insurers are partnering with ride-sharing companies such as Uber and Lyft to offer ride-sharing coverage:
  - For example, MetLife has partnered with Lyft to provide an endorsement that offers coverage for drivers and passengers at every stage of the trip: while the driver is waiting for a passenger request, is en route to pick up a passenger, and during the trip with the passenger
  - The premiums for this will vary based on the mileage driven
  - Similarly, Metromile has partnered with Uber to provide variably priced, pay-per-mile auto insurance for Uber drivers. It has integrated its platform with Uber through the Metronome device that can be plugged into the On-board Diagnostic Port (OBD-II port) of the driver's car and this helps the insurer measure the miles driven on a more granular basis
  - Last year, Allstate also launched its Ride for Hire endorsement to address the gaps between the customer's personal auto policy and the Transportation Network Company's commercial coverage
- When it comes to home insurance, there is greater interest by a range of startups such as SafelyStay, SafeShare, Slice, Bungalow, and Peers:
  - A recent entrant in this space is Slice, which has launched its homeshare insurance product for the users of homesharing platforms such as AirBnB and HomeAway

- – Slice's smartphone app allows the user to purchase a policy on a pay-per-use basis and it has designed the claims process to be more transparent, intuitive, and easy for customers
- – Slice has partnered with Munich Re for its products, supplying the technology platform that includes automated underwriting rules
- An innovative product in this regard that applies the blockchain technology for providing products for the sharing economy is by SafeShare:
  - – SafeShare has launched the first blockchain-based insurance product catering specifically to the sharing economy
  - – SafeShare's solution uses the blockchain technology created by Z/Yen Group to confirm counter-party obligations and its product is underwritten by Lloyd's of London
  - – The blockchain technology utilizes a timestamping MetroGnomo to validate claims and helps the company offer its insurance products to customers in real-time while maintaining a history of insured transactions
  - – The firm has partnered with Vrumi, a firm for the sharing economy that connects homeowners with professionals seeking office space and allows them to rent out extra rooms
  - – Additionally, it also offers a 24-hour claims service helpline[6]

Implications
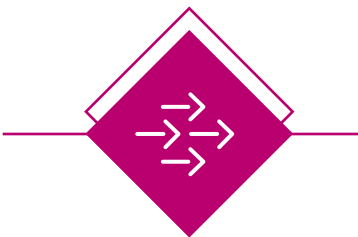
- As the sharing economy provides opportunities to extend insurance coverage to include new situations, it provides an additional revenue stream for insurers
- To cover the new types of risks emerging from the sharing economy, insurers will have to plan their risk assessment and underwriting models in the absence of historical data
- As the sharing economy involves the need for insurance coverage for specific and shorter durations, the nature of products will shift to provide insurance on an on-demand basis
- Insurers will thus be required to build their data and technology capabilities and also develop more agile operating models in order to implement dynamic, on-demand products

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6   "SafeShare – Blockchain Based Insurance Solution for Startups", The Digital Insurer, accessed October 2016 at
    http://www.the-digital-insurer.com/dia/safeshare-blockchain-based-insurance-solution-startups/

Trend 05: Increasing Use of Digital and Mobile for Risk Management and Better Customer Experience

The insurance industry is increasingly leveraging digital and mobile technologies to enhance their risk management capabilities and improve customer experience

Background

- Global sales of smartphones to end users totaled 349 million units in the first quarter of 2016, a 3.9 percent increase over the same period in 2015, according to Gartner, Inc.[7]
- Customers are now more keen on getting benefits from insurers based on the personal information shared by them through the latest gadgets and apps
- Digital and mobile technologies are playing a very crucial role in speedily tapping the right mobile application solutions and development tools that can help insures to gain a competitive head start

Key Drivers

- Need for enhancing customer experience as a critical means to improve customer acquisition and retention
- Increased ability of insurers to proactively mitigate risks due to connected devices and analytics
- Fast-growing demand or increasing popularity of smartphones, as well as new lifestyle management apps and products

Trend Overview

- The life insurance industry is witnessing a transformation as InsurTech firms are now providing main stream innovative products and services to enhance customer experience:
  - Haven Life is an online provider of term life insurance which relies on computers to make a quick decision on policies up to $1.0 million through online questionnaire, state motor-vehicle records, prescription-drug histories, and various other data sources
  - BIMA is again a leading example of mobile delivered insurance in emerging markets whose customer base is now around 7 million and spreading across eight countries
  - Ladder is redefining customer experience with life insurance purchase by using latest technology to streamline the purchase process and offer coverage in a matter of minutes
- The health insurance industry is especially witnessing a range of mobile apps that enable insurers to proactively mitigate risks while helping customers manage their health:

**Exhibit 4: Use of Digital and Mobile in Insurance**
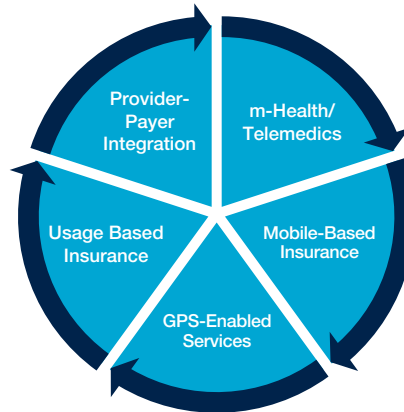
Source: Capgemini Financial Services Analysis, 2016

- – Gamification apps such as QuitNow! and Kwit are designed to help patients control their smoking through self-reports of cigarette use
- – Customer adherence apps help customers to regularly follow their medication and treatments through reminders and games. For example, Reflexion Health's product, The Vera System, aims to increase a patient's adherence to their physical therapy exercises by coaching patients through their exercises and the system sends performance data and other information back to the clinicians for review
- – Insurers can also implement chronic disease management through wearable devices. For instance, Cigna has partnered with BodyMedia to use their armband tracker for diabetes prevention and management
- – UnitedHealthcare has developed a pilot project named ScriptHub Plus wherein once a patient gets their medication from physician, the app will help the them in getting the prices for the drugs under the patient's insurance plan at the location requested
- In P&C insurance, insurers are using mobile apps to assist customers or to enable them to improve safety:
  - – State Farm's Driver Feedback™ app evaluates customer's driving behavior from the phone's accelerometer and shares tips to improve driving habits
  - – Allstate's Good Hands Rescue® mobile app uses GPS data from the customer's phone to quickly mobilize a service provider for their assistance

Implications

- Today, insurers are providing online tools/apps that help gain better customer insights which in return help them in proving better products and services resulting in enhancing overall customer experience
- The various tools result in more accurate premium pricing and lower claims costs through mitigating risk or calculating the risk more precisely
- Customers are now able to manage their risk well such as through usage based insurance wherein they understand their driving pattern which helps them in deciding the correct policy for them as well as paying as per their driving
- Also, the wellness incentives and behavioral tools help customers to maintain a better lifestyle, further lowering risk and improving satisfaction level
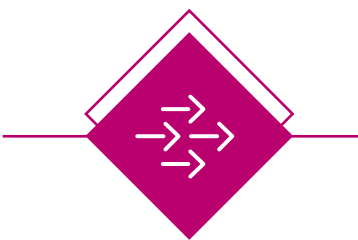
Trend 06: Use of Analytics for Improved Profitability and Customer Experience

Advanced data analytics is being leveraged by insurers for driving profitability and enhancing customer experience

Background

- With exponentially greater data availability and advancements in analytical capabilities, insurers are able to achieve better risk management and greater control on profitability by leveraging data to:
  - Offer proactive risk mitigation by identifying and prioritizing risks
  - Identify new risk rating factors for more accurate risk assessment and premium pricing
  - Conduct a more granular analysis of underwriting loss and claims fraud to secure greater profitability
- Analytics is also being leveraged by insurers to obtain a more granular understanding of their customers so as to personalize products and services

Key Drivers

- Availability of exponentially higher volume of data through unstructured sources such as social media and real-time data through connected devices
- Sophisticated statistical modeling techniques
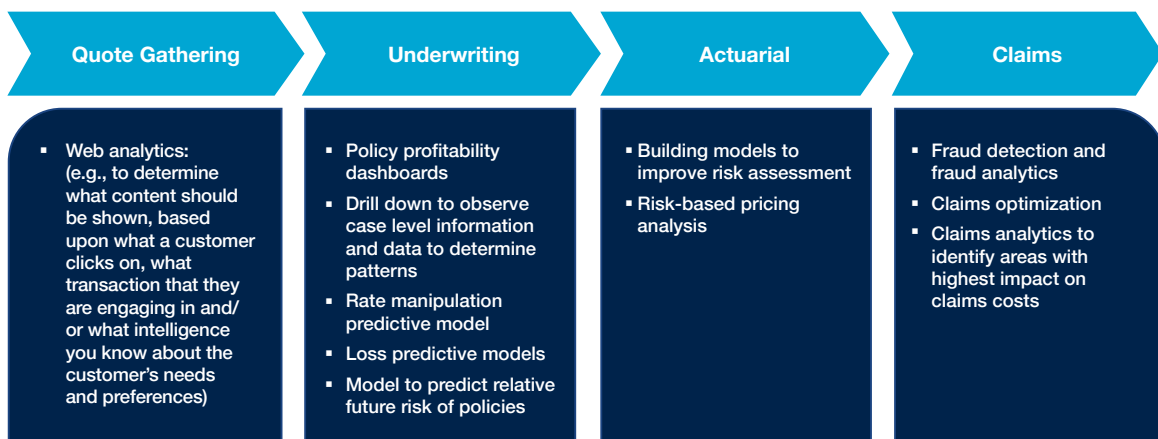- Availability of parallel computing power

Trend Overview

- While data analytics has always been on insurers' radar due to its multiple benefits, the use of analytics is extending to more areas of the insurance business
- Insurers are using data analytics across the value chain for better risk management to drive greater profitability, as well as to enhance customer experience
- **Claims:**
  - Insurers can apply a combination of techniques such as business rules, predictive modeling, text mining, database searches, and exception reporting for better fraud analytics
  - They can also use analytics for recovery optimization, settlement optimization to estimate claims and assign them to the right resource, and litigation optimization
- **Insight-Driven Strategies:**
  - Analytics can help insurers plan more advanced risk mitigation strategies than is done presently
  - For example, insurers can monitor routes on real-time basis and warn drivers about poor road conditions or dangerous turns in the road
  - Insurers can monitor weather conditions and warn customers in advance so that they can plan their travel accordingly
  - Over time, the data gathered can be used to identify high-level risk trends such as the most common reasons for claims in a particular product line which can then be used to mitigate those causes and improve the underwriting loss ratio

- **Enhancing Customer Experience:**
  - Analytics can be used by insurers to develop personalized offerings based on their understanding of customer needs and preferences from behavioral data; for example, based on insights from the behavioral data of its mobile app users, Progressive identified that its customers wanted to be able to purchase insurance on the app itself and developed an offering for the same
  - Insurers can empower their agents with insightful tools that enable agents to offer more personalized service; for example, the MetLife Wall provides the insurer's service representatives a 360-degree view of the customer by sourcing data from more than 70 legacy systems

Exhibit 5: Big Data Analytics across Insurance Value Chain

Quote Gathering	Underwriting	Actuarial	Claims
• Web analytics: (e.g., to determine what content should be shown, based upon what a customer clicks on, what transaction that they are engaging in and/or what intelligence you know about the customer's needs and preferences)	• Policy profitability dashboards • Drill down to observe case level information and data to determine patterns • Rate manipulation predictive model • Loss predictive models • Model to predict relative future risk of policies	• Building models to improve risk assessment • Risk-based pricing analysis	• Fraud detection and fraud analytics • Claims optimization • Claims analytics to identify areas with highest impact on claims costs

Source: Capgemini Financial Services Analysis, 2016

Implications

- Big Data analytics reduces the length of underwriting cycles and the claims lifecycle by providing real-time quotes, and aids on-the-spot claim settlement, which in turn helps in improving the profitability of insurance organizations
- Leveraging analytics will also improve insurers' profitability through better risk selection and proactive risk mitigation based on insights from real-time data
- Data analytics will develop the capability to determine which customers are most likely to leave, as well as which claims pose minimal risk and are safe to accelerate to resolution
- With the help of analytics, insurers can leverage numerous structured as well as unstructured data sources to gain more accurate and granular insights into customer preferences
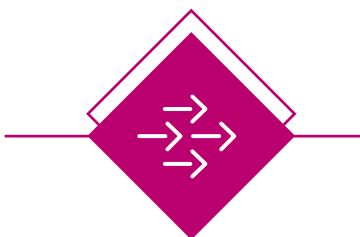
Trend 07: Greater Use of Internet of Things (IoT) for Building Data and New Models

Internet of Things (IoT) is finding active interest from insurers as it enables new models and creates a strong data pool

Background

- The IoT refers to a network of physical objects that contain embedded technology to gather information about specific objects with 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 P&C line of business was the first to adopt IoT in the form of vehicle telematics, but this technology is now also witnessing increasing interest in other sectors

Key Drivers

- In insurance, among all the technologies in IoT, smart homes is one of the fastest growing segments, which is expected to reach up to $235 billion globally by the end of 2016[8]
- Apart from smart homes, the increasing popularity of wearable devices also enable life and health insurers to better engage customers while obtaining real-time insight into risk
- In commercial insurance, the demand for usage-based insurance, sensors/detectors, and drones are increasing, as these are highly equipped with self-learning and artificial intelligence capabilities
- For example, sensors on objects and location-based sensors such as smart thermostats, security technologies, alarms, and industrial control systems are on high demand for commercial vehicles and shipping containers, factories, warehouses, and offices

Trend Overview

- With the emergence of new data streams and advanced analytics capabilities, new technologies are moving from pilot phases and becoming an integral part of new business models such as usage-based insurance
- Until a few years back, IoT was viewed as more of a futuristic phenomenon by insurers and many followed a wait-and-watch approach
- However, insurers have now started investing in IoT, and smart homes is an area witnessing a higher demand
- Insurers such as USAA, American Family, State Farm, Liberty Mutual, and Aviva are incentivizing customers to use home sensors, as it helps them proactively mitigate risks for customers

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[8] "What opportunities do smart homes provide for insurers?", Cindy De Armond, John Mulhall, May 18, 2015, Property Casualty 360⁰, accessed October 2016 at http://www.propertycasualty360.com/2015/05/18/what-opportunities-do-smart-homes-provide-for-insu

- In life and health insurance, IoT can be used by insurers to enable their customers to stay connected and receive timely care so as to avert a crisis; for example, State Farm's Connected Care program enables customers to create an ecosystem of connected devices that ensure the safety of elderly customers when they stay independently
- Commercial insurance, which was already involved in proactive risk management, also stands to benefit immensely from the real-time data being made available through IoT
- Commercial insurers are also actively investing in IoT with Munich Re, HSB's venture arm sponsoring Plug and Play's IoT accelerator to explore its use in commercial lines

Exhibit 6: Benefits of IoT
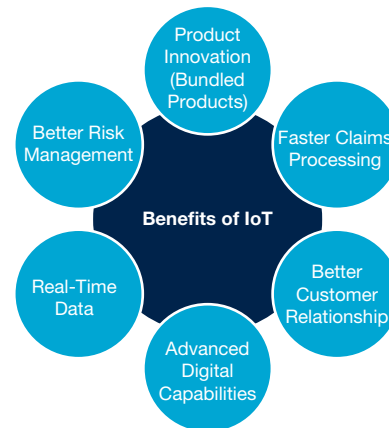
Source: Capgemini Financial Services Analysis, 2016

Implications

- IoT is enabling insurers to explore a new model of insurance based on proactive risk mitigation which is mutually beneficial for insurers as well as customers
- The nature of insurance pricing and underwriting is evolving to become more dynamic and personalized
- IoT is also transforming the nature of insurer-customer interactions by exponentially increasing the number of touchpoints that insurers can leverage for customer engagement
- Additionally, the collection of streams of near real-time data enables insurers to create a rich data pool that can be leveraged to create a competitive advantage in the market
- However, it is important for insurers to develop their data and technology capabilities so as to integrate multiple data sources and manage large amounts of data
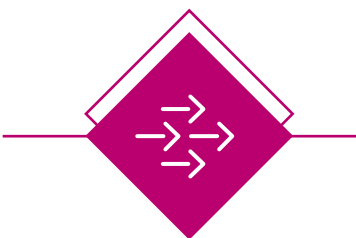
Trend 08: Increasing Use of Value-Added Services

Insurers are increasingly using value-added services as a means for competitive differentiation and building deeper relationships with customers

Background

- Value-added services include the non-core services in an industry or the enhancements made to the core product or service offered to customers
- In industries that face increasing commoditization or competition, value-added services are often leveraged to differentiate a company's products or services from its competitors
- This trend is increasingly seen in the insurance industry due to the growing competition and recent technological advancements that enable innovative value-added services

Key Drivers

- As customer expectations increase, driven by their experience in other industries, and competition in the industry increases, it is becoming important for insurers to be more customer-centric
- The advancements in mobile devices, connected technologies, and data analytics are making it possible for insurers to provide customers with a range of value-added services

Trend Overview

- As connected technologies and advanced analytics make it possible for insurers to connect with customers on a more individual basis, insurers are increasingly providing customers with a variety of value-added services in addition to core insurance services
- While many of these services are geared toward proactive risk management so as to reduce claims incidents, some services are designed purely to enhance the customer experience
- Insurers are also adding non-insurance related loyalty and rewards that cater to specific customer preferences, as long as there is no additional costs borne by the carrier; these types of rewards focus on time-saving services, lifestyle, and variety to appeal to the policyholder
- Value-added services can help insurers achieve better risk mitigation, deeper customer relationships, and competitive differentiation
- Some of the types of value-added services being explored by insurers in life and health insurance are:
  - **Health management apps** that provide detailed information about disease management or enable customers to adhere to medication or treatments
  - **Customer care packages** that go beyond providing only an insurance policy to providing a complementary package of services that can ensure complete care of the customer's health and safety

- **Enabling cost savings** through tools such as Cake Health's app that guides customers on how they can use the free services in their plan or negotiate bills
- **Enabling healthcare access** by providing customers tools to easily obtain medication or consultation for their health, e.g., Medical teleconsultation offered by AXA Assistance
- **Allied services** that are not related to risk or insurance but which provide insurers an opportunity to engage with customers and reach out to potential customers, e.g., MetLife's Infinity app that provides a digital repository for users to share photos and videos with their social network and store important documents, MassMutual Insurance's 3D virtual fantasy game called 'Save! The Game' to teach children the difference between needs and wants
- Some of the types of value-added services being explored by insurers in Property and Casualty insurance are:
  - **Home monitoring and roadside assistance**, where insurers use data from smart home sensors to send customers timely alerts and assistance in case of any danger to the home or in the case of auto insurance, provide assistance during an emergency or breakdown
  - **Concierge services**, in addition to insurance coverage, that help customers with related transactions such as hotel or flight reservations with regard to travel insurance
  - **Property selection and management** tools such as Liberty Mutual's Home Gallery® app that helps users create a home inventory to catalog their belongings

Exhibit 7: Categories of Value-Added Services in Insurance
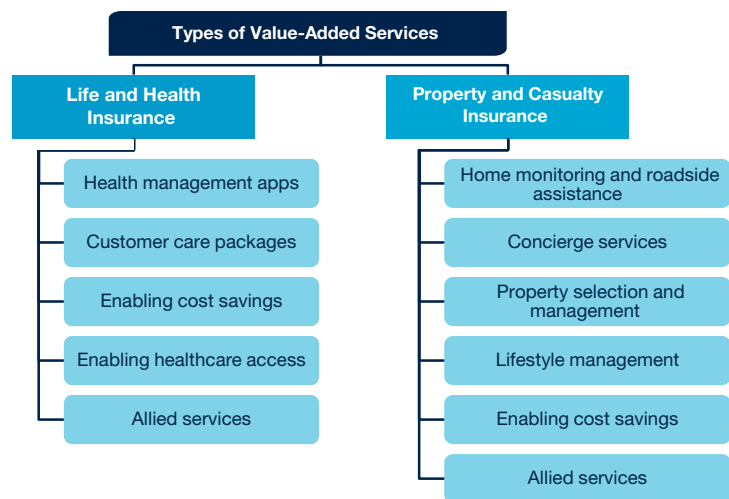
Source: Capgemini Financial Services Analysis, 2016

- **Lifestyle management** tools such as Esurance's DriveSafe™ teen driver safety program that helps parents monitor their teen children's driving behavior through a telematics device
- **Enabling cost savings** through apps such as the Esurance Fuelcaster™, which helps customers optimize their fuel expenses by providing forecasts and information on the cheapest options in their neighborhood
- **Allied services** such as Progressive's Art App that offers a collection of contemporary art that users can browse through or Metromile's Smart Driving app that enables users to optimize their trips
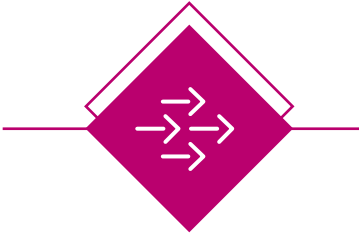
Implications

- As insurers provide more value-added services, there will be a significant increase in the frequency of interactions between insurers and their customers that can be leveraged to build deeper customer relationships
- By targeting the right value-added services, insurers can lower their claims costs through proactive risk mitigation and they can also achieve competitive differentiation
- By building strong brand engagement, value-added services will also position insurers to counter the threat of entry by big technology players and increased competition
- However, as value-added services are not generally monetized, it will be important to plan an optimal portfolio of services

Trend 09: Blockchain to Enable Streamlined Insurance Operations

Blockchain technology has the potential to transform insurance industry through the use of smart contracts and digital assets and it can also disrupt various business models

Background

- The Distributed Ledger Technology (DLT) or blockchain technology, which was the underlying technology of Bitcoin, is leveraged across many industries for the advantages it offers in sending, receiving, and storing information
- Key business processes such as policy management and claims management are expected to be transformed and new business models are likely to emerge, using DLT

Key Drivers

- Blockchain can provide secure, reliable, and fast applications, which will enhance the quality of services provided
- Increase in the volume and velocity of data from new data sources such as social media and IoT needs an effective system to deliver real-time insights and actions
- Usage of blockchain will also enable firms to cut down operational costs

Trend Overview

- Blockchain can be leveraged in automation of policy administration:
  - Policy administration can be automated by coding policy and claims pay out conditions in blockchain
  - The specialized contract, named as a "smart contract", can be triggered by data feeds from public databases and connected devices and claims payments can be automated when the insured event occurrence is validated
  - London Market Group (LMG) has sponsored a study to explore the capabilities of smart contracts running on blockchain[9]
- Decentralized Autonomous Organizations (DAOs) can be formed, where policy and claims management are carried out by a highly decentralized and self-regulated set of individuals:
  - Similar to P2P insurance, DAOs will pool in their premiums to pay claims and utilize the blockchain to verify and conduct transactions
  - A network of independent underwriters can also be selected on behalf of DAOs for underwriting and loss assessment
- Smart information assets, which is an extensive database of verified information (with timestamps), can be created using blockchain:
  - Once created, the database can be leveraged during the actuarial and underwriting stages
  - Claims fraud can be minimized by accessing cross-firm data

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[9]   "UK Insurance Trade Body LMG to Investigate Blockchain Technology", Richard Kastelein, BlockchainNews, November 2, 2016, accessed Novemebr 2016 at http://www.the-blockchain.com/2016/11/02/uk-insurance-trade-body-investigate-blockchain-technology/
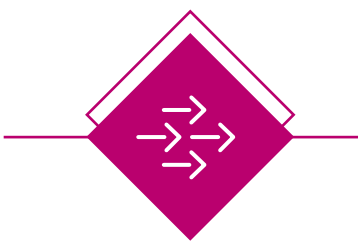
- New business models are expected to emerge banking on blockchain technology:
  – Insurers can design micro-insurance products targeting the currently underserved markets
  – De-centralized, block-chain based marketplaces can emerge

Exhibit 8: Applications of Blockchain in Insurance
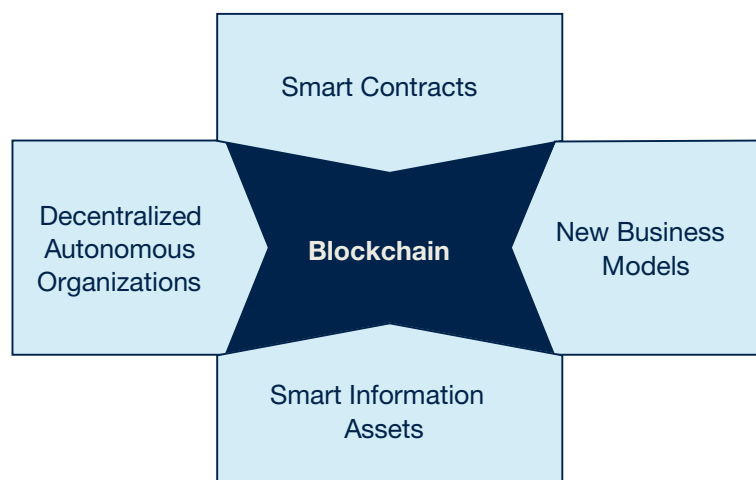
Source: Capgemini Financial Services Analysis, 2016

Implications

- Through smart information assets and smart contracts, blockchain can enable a more streamlined operating model in insurance
- Inputs from various decentralized data sources can be leveraged in key business processes
- Decentralized databases will also ease the process of data sharing between firms
- Blockchain can also enable firms to automate claims processing and fraud detection
- If decentralized insurance models picks up, the role of insurers may shift from risk managers to consultants or facilitators

Trend 10: Greater Use of Augmented Reality in Insurance

Augmented reality is being explored for insurance marketing and has significant potential for greater use in insurance with applications in training and claims processing

Background

- Augmented reality (AR) is the creation of a composite view by supplementing the real-world view with text, audio, video, or any computer-generated digital output, which can enhance the illustration of the real-world view
- As of now, AR is used by the insurance industry for marketing and training purposes, where complex offerings or processes are explained in a simple, fun, and interesting way to customers and employees (see Exhibit 9)
- AR is also explored for damage inspection, which can aid in quick and error-free claims processing

Key Drivers

- Introduction of low-cost AR devices, which can be operated via smartphones
- Rising demand for an enhanced customer experience
- Need for innovative marketing techniques to face competition
- Need for cost reduction and improved realization of return on investment in training and marketing
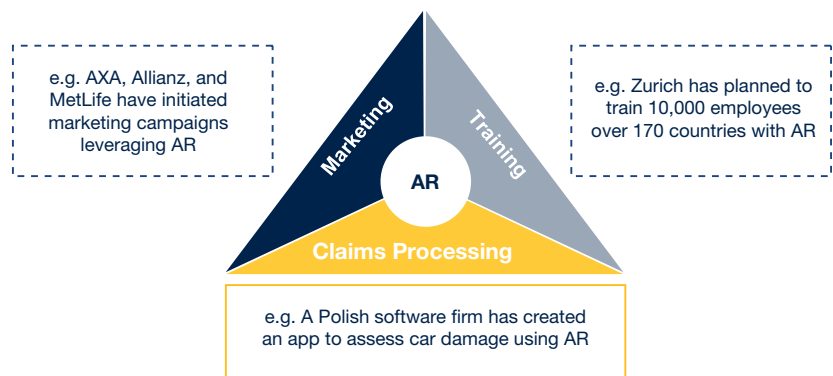
Trend Overview

- Due to the superior experience provided at a lower cost, AR is expected to have a steep rise in the number of users, with the revenues estimated to reach $120 billion by 2020[10]
- Usage of AR in marketing is the key area of focus for insurance companies, as AR helps insurance companies hold the customer attention:
  - AR apps can be used to explain about the products and services of the firm:
    - LV= distributes flyers, which shows a 3D illustration of a house identifying various objects that can be insured
    - MetLife uses AR videos to deliver information on its products and services
  - AR apps can also guide customers to become aware of the potential fatalities that can occur in the future and facilitate them to take appropriate safety measures:
    - Allianz is leveraging AR to educate customers about the possibilities of home accidents
    - AXA has designed an AR app to make their customers more aware about car accidents[11]

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[10] "Augmented/Virtual Reality to hit $150 billion disrupting mobile by 2020", Digi-Capital, April 2015, accessed October 2016 at http://www.digi-capital.com/news/2015/04/augmentedvirtual-reality-to-hit-150-billion-disrupting-mobile-by-2020/#.WA2sBGxf0iR
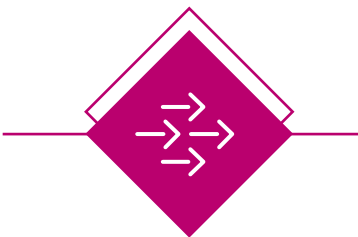
[11] "5 Insurance Companies that found a novel way for marketing", bevond, 19 March 2015, accessed October 2016 at http://bevond.com/blog/5-insurance-companies-that-found-a-novel-way-for-marketing/

- AR can be effectively used in employee training to enhance the learning experience:
  - Zurich has invested in building mobile apps, which will track the employees' training schedules and provide materials to match their learning style[12]
- AR can also be leveraged in claims processing and several companies have already begun exploring use cases:
  - A Polish software firm has developed an application using AR, which is useful for precise inspection of damages after a car accident[13]

Exhibit 9: Key Applications of Augmented Reality

e.g. AXA, Allianz, and MetLife have initiated marketing campaigns leveraging AR

e.g. Zurich has planned to train 10,000 employees over 170 countries with AR

Marketing

Training

AR

Claims Processing

e.g. A Polish software firm has created an app to assess car damage using AR

Source: Capgemini Financial Services Analysis, 2016

Implications

- Insurers can grab the attention of a wider customer base to market their products
- Training cost can be reduced significantly leveraging AR-based training modules
- Data leveraged from the usage of AR applications, such as games and tutorials, can be analyzed to generate customer insights
- Insurance firms have to collaborate with FinTech firms or develop in-house teams for creating AR solutions

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[12] "Zurich Insurance turns to augmented reality to train 10,000 managers", Bill Goodwin, ComputerWeekly.com, 22 April 2015, accessed October 2016 at http://www.computerweekly.com/news/4500244733/Zurich-Insurance-turns-to-augmented-reality-to-train-10000-managers

[13] "Your insurance reality, augmented", Michael Spiar, Saskatchewan Broker, Summer 2016, accessed October 2016 at https://www.csio.com/sites/default/files/legacy/assets/docs/articles/english/csio_article_ibas_ar.pdf

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4. "The rise of the sharing economy", *The Economist*, March 9 2013, accessed October 2016 at http://www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy

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9. "Top 5 IT Process Automation Challenges in the Insurance Industry", Gabby Nizri, ayehu.com, March 31, 2016, accessed October 2016 at http://ayehu.com/top-5-process-automation-challenges-insurance-industry/

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About the Authors

Karthik Chitta is a Consultant with the Market Intelligence team in Capgemini Financial Services with over four years of experience specializing in insurance and banking industry

Krithika Venkataraman is a Senior Consultant with the Market Intelligence Team in Capgemini Financial Services with more than four years of IT consulting and strategic analysis experience in the insurance industry

Kumaresan A is a Senior Consultant with the Market Intelligence Team in Capgemini Financial Services with more than five years of IT consulting and strategic analysis experience in the insurance industry

Priyadarsani Das is a Consultant with the Market Intelligence Team in Capgemini Financial Services with more than five years of strategic research and analysis experience in the insurance industry

Raghunandan Kothamasu is a Senior Consultant with the Market Intelligence team in Capgemini Financial Services with over four years of experience specializing in insurance and banking industry

Shravan Kundukuri is an Associate Consultant with the Market Intelligence team in Capgemini Financial Services with over two years of experience specializing in the insurance industry

The authors would like to thank the below SMEs for their contributions to this paper:

- **Anirban Majumder**, Vice President – Healthcare
- **Chirag Thakral**, Manager, Market Intelligence
- **Christopher Stevens Diez**, Insurance Business & Solutions Practice Head, Spain
- **Daniele Di Maio**, SME for the Italian Insurance Market
- **David Smith**, Vice President Insurance Transformation and Consulting
- **James Kelsey**, Vice President, Head of Sales & Marketing - NA Insurance
- **Jan Verlinden**, Insurance Leader Belgium
- **Keith Gage**, Vice President, Capgemini North America
- **Mahendra Nambiar**, VP, Solutions and Innovation Lead for Global Insurance
- **Ram Thayi**, Portfolio Delivery Executive
- **Shiva Balasubramaniyan**, Head of Testing Services (Insurance)
- **William Sullivan**, Global Head of Market Intelligence

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