

Fixing the Insurance Industry: How Big Data can Transform Customer Satisfaction



Customer Analytics: An Overlooked Opportunity to Improve Customer Satisfaction

Insurers Struggling to Keep their Customers Satisfied

Insurers are facing a moment of truth. Customer satisfaction levels have hit worryingly low levels. According to a survey conducted by Capgemini in 2014 (see research methodology at the end of the paper), less than a third (29%) of customers globally are satisfied with the services of their insurance providers. Further, customer satisfaction levels declined, almost without exception, across all stages of the insurance lifecycle – from researching quotes to filing claims (see Figure 1).

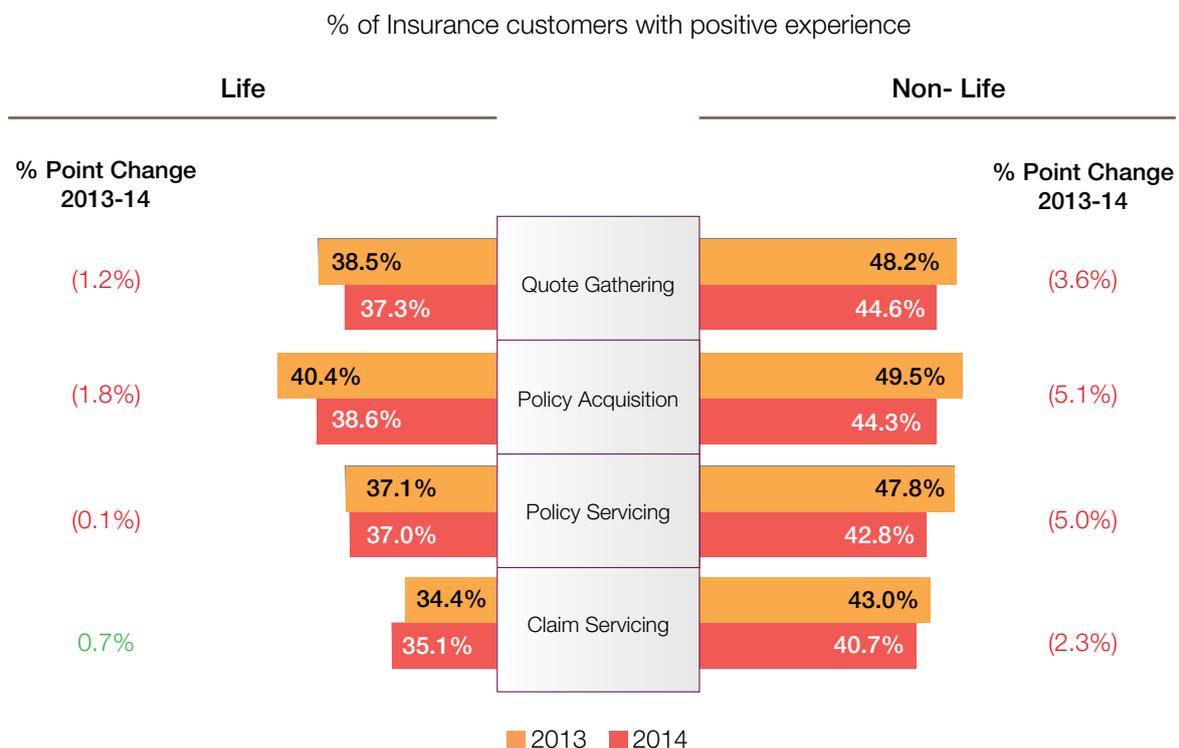
Insurers also need to be concerned about the steep drop in the satisfaction levels of Millennial consumers. In North America, for instance, the drop in positive customer experience levels was 10% more pronounced for Millennials, compared to other age segments. Clearly, insurers are not doing enough to meet customer expectations.

Digital Disruptors are Drawing Customers Away from Traditional Insurers

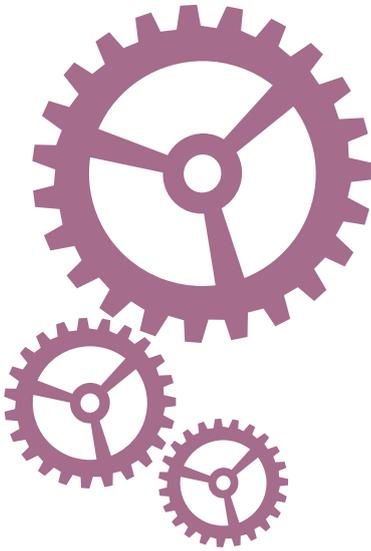
As they confront this poor customer perception, traditional insurers also face competition from new entrants who are determined to meet customer expectations. Non-traditional competitors, such as ecommerce majors and technology startups, are leveraging their data-rich customer interactions to create and sell insurance products (see Figure 2). Japanese ecommerce leader Rakuten, for instance, only began selling life and health insurance products in 2011¹. Rakuten's insurance arm has grown steadily since. In Q4 2014, the volume of life insurance policies sold increased by nearly 34% compared to the previous year, taking the total number of policies sold in 2014 to 1.035 million².

“Globally, less than a third (29%) of customers are satisfied with the services of their insurance provider.”

Figure 1: Customer Satisfaction by Stage of Insurance Lifecycle



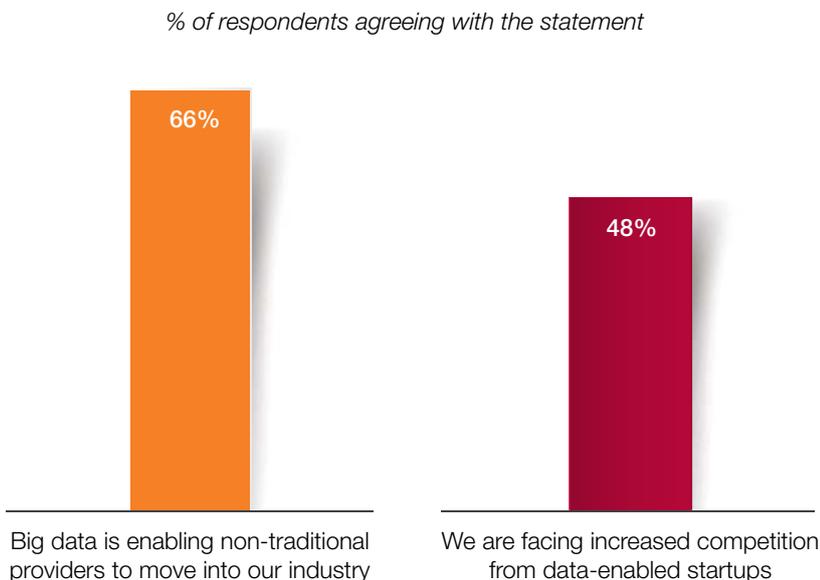
Source: Capgemini and Efma, "World Insurance Report 2015", February 2015



Similarly, Oscar Health, a New York-based health insurance startup founded in 2013, applies data to deliver a simpler, more transparent and personalized experience to its customers. Oscar Health analyzes historic claims data to provide estimates for the out-of-pocket expenses that customers can potentially incur based on their choice of care option – physician, specialist, or emergency service, among others³. The company has also partnered with wearable device manufacturer “Misfit Wearables” to track customers’ fitness data and set personalized fitness targets. Customers receive financial rewards when they meet their targets⁴. Oscar Health’s focus on improving the customer experience has helped it attract customers and investors. Enrollments doubled in 2014⁵ and the startup was valued at \$1.5 billion just two years after launch⁶.

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Figure 2: Insurers Face Increasing Competition from Non-Traditional Insurance Providers and Startups



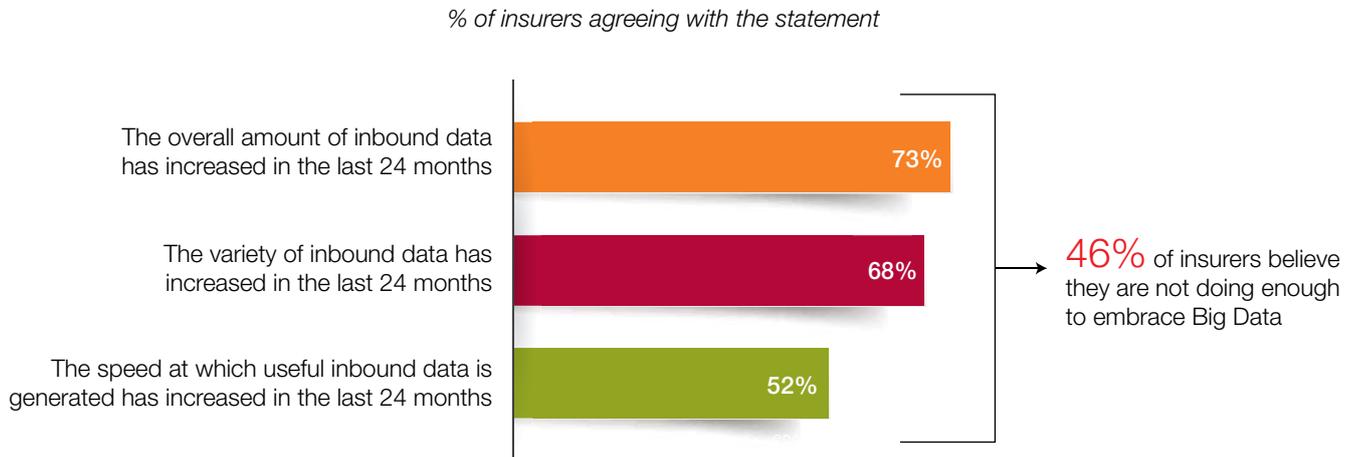
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Rakuten, Japan’s leading ecommerce company that began selling life insurance in 2011, sold more than 1 million policies in 2014.
 ”

N = 44

Note: The percentages include the number of respondents who either “strongly agree” or “somewhat agree” with the statements

Source: Capgemini, “Big & Fast Data: The Rise of Insight-Driven Business”, March 2015

Figure 3: Inadequate Use of Big Data in the Insurance Industry



N = 44

Note: The percentages include the number of respondents who agree that the volume, variety or velocity of data had either "greatly increased" or "somewhat increased"

Source: Capgemini, "Big & Fast Data: The Rise of Insight-Driven Business", March 2015

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In a survey, only 12% of insurers cited enhancement of customer experience as a top priority for using Big Data.
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Traditional Insurers have been Slow to Apply Analytics to Improve Customer Experience

The volume and variety of data that insurers have access to has grown significantly in recent years. However, a large proportion (46%) of insurers believe that they are not doing enough to leverage this data (see Figure 3). Further, the use of Big Data for the improvement of customer experience is frequently overlooked, as insurers often focus their Big Data efforts on detecting fraudulent claims and improving underwriting profitability⁷. In fact, while 33% of insurers in a survey cited improving underwriting profitability as a top priority, only 12% did so for the enhancement of customer experience⁸. This is startling given the poor levels of customer satisfaction in the insurance industry.

In overlooking the impact of Big Data on improving customer experience, insurers are losing out on a variety of opportunities to build stronger customer relationships and drive competitive advantage. In the following pages, we examine these opportunities and explore the challenges that insurers face in effectively leveraging customer data.

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Why Should Insurers Look at Customer Analytics More Closely?

Customer Analytics Allows Insurers to Personalize Pricing and Reward Customers for Positive Behaviors

Insurers have traditionally based their premium calculations on the risk profile of a pool of customers, offering standard rates irrespective of individual risk profile. As a result, customers who are less risky frequently compensate for those who exhibit riskier behavior. The use of customer analytics allows insurers to assess risk factors and price premiums more accurately.

Progressive is a stand-out example of an insurance firm that is using analytics to personalize pricing through a usage-based insurance program called “Snapshot”⁹. Customers need to install an in-vehicle telematics device that monitors distance driven, drive time and frequency of hard-braking, among other drive parameters. Progressive analyzes this data using advanced analytics to calculate personalized premiums and discounts for drivers with safe driving habits. More than 1.6 million drivers have signed up for the Snapshot program to benefit from personalized car insurance rates¹⁰.

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MetLife's 'Wall' brings together data from over 70 internal systems, to provide a 360-degree view of a customer's transactions across lines of business and touch-points.
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The application of advanced analytics techniques also allows insurers to uncover links between disparate sources of customer data, which can be used to personalize premiums. Edinburgh-based insurance firm Scottish Widows, a subsidiary of UK banking major Lloyds Banking Group, found that customers who stay within their overdraft limit or pay their credit card dues on time tend to be safer drivers. Scottish Widows uses this insight to offer discounts of up to 20% to its car insurance customers.

Customer Analytics Boosts Customer Service by Increasing Agent Effectiveness

In order to retrieve customer information, customer service agents often have to navigate disparate sources of customer data, potentially antagonizing customers with delayed responses or with incomplete and outdated information. To overcome this issue, global insurance leader MetLife built the “MetLife Wall”, a Big Data-driven application that equips agents with a single source of customer information¹¹. The Wall brings together data from over 70 internal systems, to provide a 360-degree view of a customer's transactions across lines of business and touch-points¹². With an interface similar to Facebook, MetLife Wall allows agents to view a timeline of customer transactions on a single screen, which makes it easier for them to access information. The Wall allows agents to proactively advise customers about products that might interest them and to predict and avert attrition risks. MetLife plans to expand the Wall's capabilities with next-best action models that will prescribe measures for agents to deal with customer issues¹³.

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Analytics-Driven Insights Enhance Customers' Online Experience

In order to meet customer expectations effectively, insurers will need to boost the experience that they deliver through their online channels. Research indicates that less than 30% of insurance customers report positive experiences with digital channels¹⁴. For instance, Hiscox, a global insurer specializing in insurance for small businesses, observed a gap in the number of customers visiting its website, and those starting the process of generating a quote. To prevent visitors from abandoning the quote process, Hiscox tested multiple variants of its website by measuring traffic, bounce rates and lost leads. Hiscox then redesigned its website in a way that made it easier for customers to generate quotes for their specific requirements. In addition, Hiscox segmented its customer base in order to deliver customized content on its website, such as customized product recommendations and testimonials. Hiscox's efforts have helped increase conversions for its online quote process by nearly 10%¹⁵. Hiscox has also enabled external agents to sell policies through its online channel¹⁶.

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Hiscox used analytics to personalize online experience, help customers find the right products and generate quotes.
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Effective Use of Customer Analytics Allows Insurers to Offer Value-Added Services

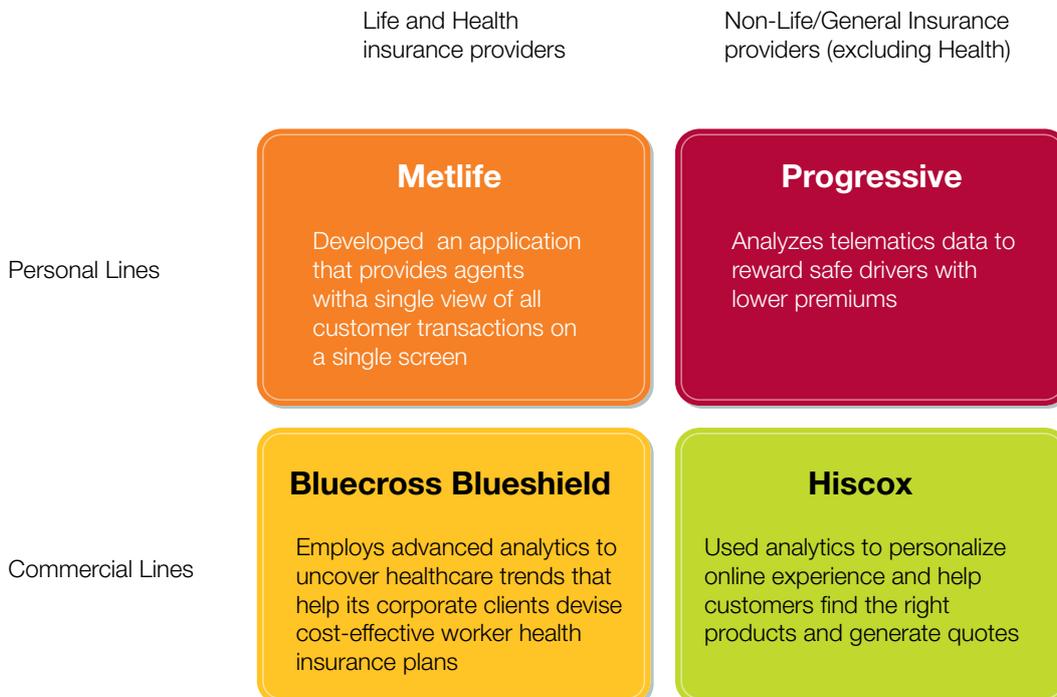
Effective use of customer analytics allows insurers to go beyond their traditional roles and deliver new services to customers. US-based commercial property insurer FM Global, for instance, offers a service called “RiskMark” to help its clients better understand the risk exposure of their properties¹⁷. FM Global inspects each property and collects up to 500 digital photos, notes and data points such as construction parameters and geographic information. The insurer analyzes this data to assess risks and offers recommendations to lower risk levels. The “RiskMark” service also allows clients to compare the risk profiles of various locations and helps them prioritize their risk management efforts¹⁸.

Customer Analytics Helps Insurers Identify New Customer Segments

Customers with special insurance needs, such as covers for pets or expensive gadgets, often find it difficult to find the right policy or attractive rates. Advanced analytics tools allow insurers to find and service such customers. UK-based startup “Bought By Many”, for instance, analyzes search engine and social media data to identify groups of customers with uncommon insurance requirements. Bought By Many then approaches insurers on behalf of the group, in order to negotiate better rates for them¹⁹. Insurers should take a cue from such startups to apply analytics to identify unmet customer needs.

“*FM Global inspects each property and collects up to 500 digital photos, notes and data points and analyzes them to assess risks and offer recommendations to lower risk levels.*”

Figure 4: Impact of Analytics on Enhancing Customer Experience



Source: Capgemini Consulting Analysis

What is Holding Insurers Back from Using Customer Analytics Effectively?

A Product-Centric View Prevents Insurers from Gaining a Deeper Understanding of Customer Needs and Behavior

Most insurers are organized around products such as life insurance, health cover and worker compensation, with very little data sharing across product lines. As a result, insurers frequently lack a composite view of a customer's overall relationship with the organization. A product-centric view blinds insurers towards customer needs and customer lifetime value. Our research suggests that the highest ("Leading") maturity level of European and US insurers in terms of their transformation to a customer-centric business stands at only 1% and 24% respectively. "Leading" insurers have successfully redesigned their business around their customers. They deliver valuable customer-centric propositions and achieve high levels of customer satisfaction.²⁰

“Only 14% of insurers have introduced data management systems to predict future patterns in customer behavior.”

“A recent research shows that only 20% of insurers use social media interaction data and only 10% use sensor data.”

Lack of Adequate Data Infrastructure Inhibits Effective Use of Customer Data

Gaps in data infrastructure limit insurers' ability to understand customer needs and build stronger relationships. Our research reveals that only 14% of insurers have introduced data management systems to predict future patterns in customer behavior²¹. US-based Nationwide Mutual Insurance Company is an exception. Nationwide has made significant investments in Big Data technologies²². Wes Hunt, VP of Customer Analytics at Nationwide, says: "We had to have a solution that would allow us to know our customers, understand the behaviors they're engaged in, and then be able to use that information to drive the business forward". Nationwide invested in a Big Data and analytics platform centered on master data management that enables a 360-degree view of customers, as well as predictive analytics tools. The solution converts scattered, raw data into insights around customer policies, renewal periods, and customer life changes, that in turn help Nationwide deliver an enhanced customer experience.

Insurers Only Use a Limited Set of Data Sources to Understand Customer Behavior

Insurers largely depend on conventional data sources to understand customer needs and preferences, but make very limited use of unstructured data sources, such as social media and sensor data. Research shows that only 20% of insurers use social media interaction data and only 10% use sensor data²³. XL Group, a Bermuda-based insurer, stands out by leveraging a variety of external data sources to understand the factors that trigger claims²⁴.

Lack of IT Agility Impedes Insurers Ability to Develop Insights from Analytics Initiatives

Insurers are saddled with legacy IT systems and traditional software development approaches that limit their ability to quickly develop insights from analytics initiatives. Our research reveals that 51% of insurance executives believe that the IT development process at their organization is a constraint to develop insights more quickly²⁵. Forty-one percent of insurers also assert that the current development cycle for analytics insights is too long and does not match their business requirements.

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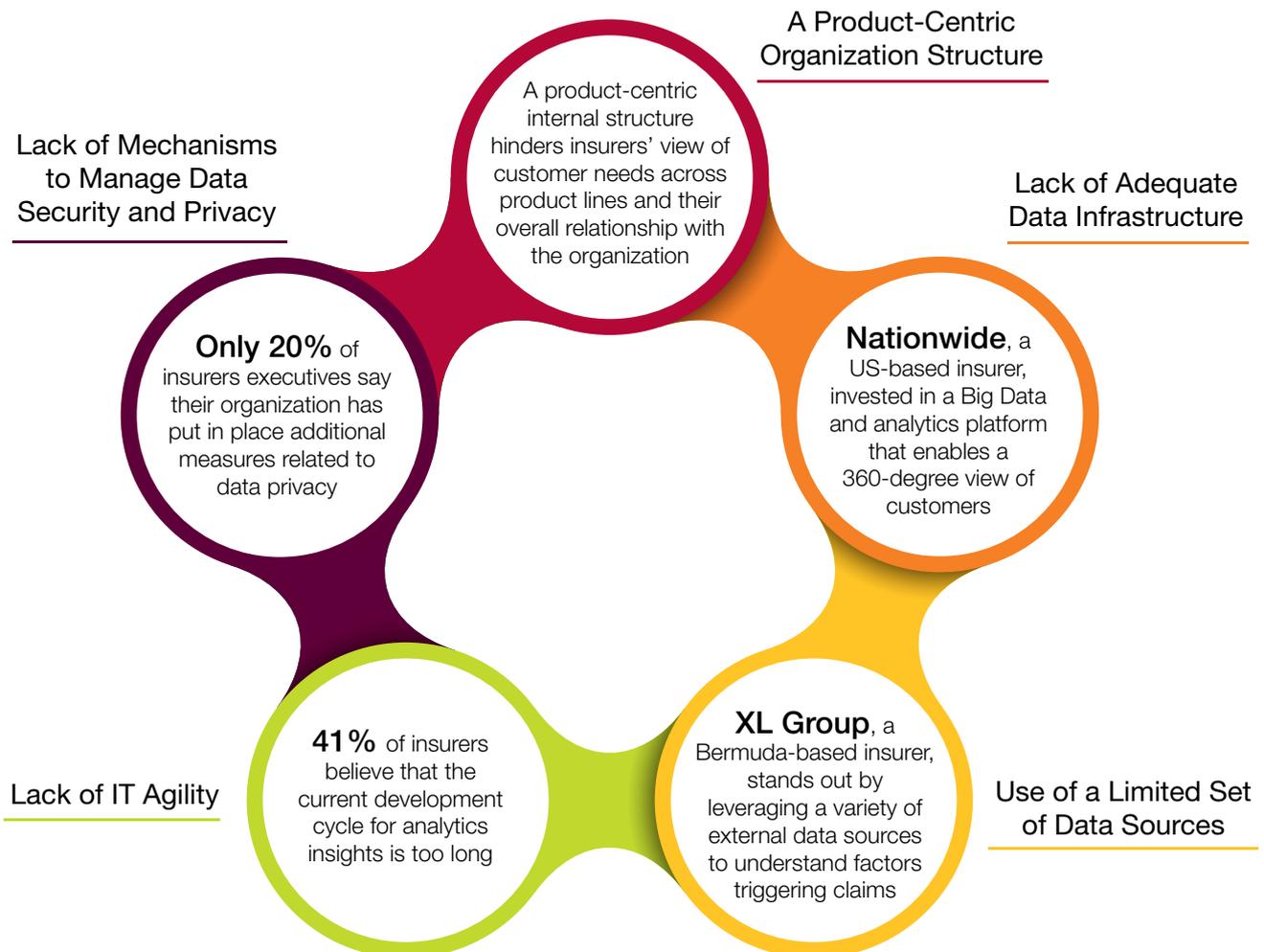
Lack of Mechanisms to Manage Data Security and Privacy

The ability to apply customer analytics is closely linked with an insurer's ability to manage data security and privacy concerns. In a survey of US consumers, 80% of respondents expressed willingness to purchase usage-based insurance policies. However, more than 35% were

concerned about the privacy implications of insurers gathering their driving data²⁶. In order to put customer data to use, insurers need to set up systems and processes to manage these concerns. Few insurers, however, have done so. Our research showed that only 23% of insurers have put in place additional data security to protect customer data and only 20% have established additional measures related to data privacy²⁷.

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Figure 5: Factors that Hold Back Insurers from Using Customer Analytics Effectively



Source: Capgemini Consulting Analysis; CrucialCIO, "Nationwide Gets Closer To Its Customers" November 2013; Data Informed, "Commercial Insurers Slowly Warm Up to Predictive Analytics", March 2013; Capgemini, "Big & Fast Data: The Rise of Insight-Driven Business", March 2015

The Road Ahead: How Can Insurers Strike Gold through the Use of Customer Analytics?

Establish a Data Leader to Take Charge of the Organization's Overall Data Strategy

Our recent Big Data research revealed that firms which appointed a Chief Data Officer (CDO) reported a 43% success rate for their Big Data initiatives, compared to 31% for firms that did not appoint one²⁸. Our latest research with Efma on Chief Data Officers in the Financial Services industry indicates that even though the industry leads most others in terms of CDO appointments, it has not yet fully expanded the role of the CDO²⁹. Most CDOs focus either on data management from a compliance perspective or value-creation by generating new opportunities

using Big Data. In order to build a data-driven organization, insurers will need to begin by appointing a data leader entrusted with the organization's overall data strategy, including both data compliance and value creation from Big Data.

Augment Data Leadership with Governance and KPIs to Support a Customer-Centric Operating Model

To engineer a shift from a product-centric organizational model to a customer-centric one, insurers need to support the data leadership with strong governance and KPIs. When MetLife began its transition towards becoming a more customer-centric organization, it did just that. MetLife

appointed Claire Burns as Chief Customer Officer to lead this transformation³⁰. Burns worked closely with lines-of business and product groups in order to apply customer insights to drive improvements in customer experience. In a step towards breaking pre-existing silos, Burns introduced small task forces focused on developing solutions for specific customer segments. Further, MetLife established internal forums where teams worked together to map the customer journey and design experiences more holistically. MetLife also established a mix of key internal metrics to track the progress of its transformation. For instance, MetLife began to track Net Promoter Score across 150 different customer transaction touch points³¹.

Figure 6: Key Measures Insurers Can Take to Enhance Customer Experience through Big Data and Analytics



Source: Capgemini Consulting Analysis

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MetLife tracks Net Promoter Score across 150 different customer transaction touch points.

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Invest in Building Data Management Infrastructure that Enables a Single View of the Customer

A robust data management infrastructure that facilitates a single view of the customer is critical to achieve customer-centricity. Such an infrastructure requires tools for data governance, master data management and metadata management that formalize collection, storage and use of structured as well as unstructured data. The infrastructure should be built to support SQL-based as well as data science-based consumption scenarios. Further, in order to encourage adoption, insurers should look at adopting a utility-based pricing model that allows business units and functions the flexibility to pay only for the data resources that they actually consume.

Adopt an Agile Test-and-Learn Approach to Rapidly Test and Rollout New Initiatives based on Customer Analytics

Keeping pace with evolving customer preferences in the digital age requires an accelerated approach to new product development. New software development methodologies such as DevOps make this possible by enabling development and operations teams to work together more closely in order to swiftly iterate code development cycles. Leading US-based health insurer Humana is actively leveraging DevOps to accelerate the development of its data-based customer apps³². Its DevOps team has launched more than twelve updates

to the HumanaVitality program app that allows customers to set personal health goals and challenge themselves or other users, since the launch of the app in June 2014. Insurers should also organize hackathons to bring together data scientists from within their internal workforce, and leverage their combined expertise to identify solutions to key business problems. Learnings from this exercise can serve as proofs-of-concept or building blocks of a larger Big Data solution to be developed later.

Adopt Non-Traditional Approaches to Acquire Big Data and Analytics Skill-Sets

The insurance industry needs to adopt innovative approaches to address the shortage of Big Data and analytics skill-sets. US-based insurer Nationwide, for instance, has partnered with Ohio State University (OSU) to recruit students who work on its customer analytics initiatives using real-world data³³. The Nationwide Center for Advanced Customer Insights (NCACI), which leads this program, employs a group of students for up to 20 hours a week. The students work with Nationwide's data science experts to develop analytics-based solutions to improve marketing and distribution, customer satisfaction and lifetime value, among other areas. Leading French insurer Axa, on the other hand, has set up an innovation lab in San Francisco to gain access to technology talent³⁴.

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Develop Transparent Data Privacy Policies to Address Customer Concerns around the Use of Personal Data

Insurers must take necessary steps to ensure their use of personal data conforms to legal and ethical standards. Personal data protection laws are among the strongest in the European Union where insurers are bound by the Data Protection Directive³⁵. The directive makes it mandatory to take unambiguous consent from individuals regarding personal data collection and sharing. The EU is also considering a new regulation that seeks to establish a single, pan-European law based on this directive³⁶, which will impose a fine of up to 2% of a company's annual global turnover in case of non-compliance. In order to avoid such repercussions and to safeguard customer interests, insurers should establish clear data privacy rules and processes. Keeping customers informed at all stages of data collection and about ownership of data is critical. Insurers should also consider adopting software to encrypt or anonymize sensitive information to prevent unauthorized use of data.

Customer Data: The Path Less Travelled

In today's digital economy, poor customer satisfaction levels raise significant concerns about an organization's prospects. This is because customers' expectations of what constitutes an excellent customer experience are being shaped by their interactions with digital natives in other sectors, such as Amazon and Uber. The bar for customer service is being continually raised, which is an extremely worrying development if your customer satisfaction levels are heading in precisely the opposite direction, as they are in the insurance industry. Insurers cannot ignore the opportunity that data offers to reverse this situation and put themselves back on the path to improved customer satisfaction.

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Nationwide's Center for Advanced Customer Insights (NCACI) employs a group of students from Ohio State University to work with Nationwide's data science experts and develop analytics-based solutions.
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