Defining the Future of Digital Insurance

Transforming to a Digital Enterprise
Empowered consumers, innovative competitors and new technologies are bringing massive changes to the insurance industry. No longer can insurers sell traditional commoditized indemnification products through a network of traditional agents. Now they must create an entirely new set of products that inspire customer demand, anticipating and addressing customer needs and wants. These products must be simple and flexible enough for customers to evaluate, tailor and purchase through any channel. Furthermore, they need to offer a holistic value proposition — one centered around the aspirations that really matter to consumers, including well-being, safety and reaching personal goals.

To achieve this, insurers will need to develop their own ecosystems of partners and value-added service providers, integrating them through digital platforms. They will have to embrace cloud for the agility it affords, and begin to rely on analytics for decision making and predictions. Organizations will also need to tackle, once and for all, their legacy business and IT landscape. It’s time to gain control over the vast IT estate that simply must keep pace with the business today.

Once control is established, the next step is streamlining processes and systems to improve and, in fact, differentiate operations. This brave new world brings with it increased risk, including cyber threats and ever-evolving regulatory measures, but the benefits far outweigh the cost to ensure success in the insurance business today.
Like watching storm clouds gather on the horizon, insurers have seen change building in their industry over the past few years. The same advances in technology that upended music, publishing, travel and other sectors are pushing their way inexorably and forcefully into the insurance market.

Consumers have come to expect a highly personalized, self-directed shopping experience followed by instant fulfillment — and they’re looking for this same service from insurers. Competitors, emboldened by the disruption and better adapted to the new reality, are entering from many different industries: financial, retail, automotive and more.

Regulation and a conservative business approach have caused insurers to adjust slowly, but outside forces are now bringing to light the full effects of this transformation-in-waiting for the insurance industry. Disrupters have found new ways to evaluate risk, with tools like big data, drones and telematics. They’ve expanded offerings with microinsurance, and they’re finding better ways to engage with customers in an online world. They’re also experimenting with blockchain and the possibilities it presents for the industry.

The shifts that are taking place affect every aspect of the industry value chain, which means the insurance marketplace of the future will soon look nothing like that of the past. This paper examines the drivers of change, the shifts that are occurring and what insurance companies can do to accelerate their journey to a digital future.
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Cybersecurity Risks in Tomorrow’s Insurance Industry

Digital shifts are changing the way all businesses think about security, and insurance is no exception.

Data no longer resides safely within the traditional moat-and-castle environment. Today, data flows regularly across boundaries through an API-driven ecosystem. With the increase in wearables, sensors, mobile devices and partner services, insurers have more data coming in from outside the enterprise, and more information being shared and managed beyond its walls. Organizations must protect customer data and meet evolving privacy and compliance regulations, even as the attack surface increases.

How to transform IT without compromising security

To achieve this goal, insurers must continually work to balance business agility and innovation with the need to safeguard sensitive information.

Crucial to this process is the ability to detect advanced threats and incidents, minimize detection time and have a plan for remediation. Should a breach or a data leakage occur, the financial and reputational damage could devastate a company. Insurers can avoid this fate by establishing cyber crisis management.

API authentication must be implemented and managed successfully across the enterprise. Authorization should be based on a broad identity context and include practical factors such as incoming IP address, access time windows, device identification, and geolocation. One emerging go-to resource is OAuth, an open standard for user-centric authorization and authentication.

To improve agility and create cost efficiencies, companies are shifting data from on-premises to cloud-hosted and cloud environments that may be managed by third parties. This shift in ownership and trust can be challenging to accept due to a perceived loss of control; however, it can also provide an opportunity for insurers to “right the ship,” gain needed visibility, better organize processes and data, and prioritize based on data criticality.

Major security themes to consider in digital insurance are:

• Digital transformation and security posture: Board-level visibility and active support of cybersecurity
• Secure by design: Building a cyber-resilient and compliant environment
• Data classification and protection at scale: Enabling rapid growth and exchange of data through governance and enforcement of compliance
• Cyberdefense: Detection, response and recovery beyond protection capabilities
• Threat intelligence: Predicting and anticipating future cyber events to protect against an innovative adversary
• Cyber resilience: Ongoing efforts to adapt, evolve and improve
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63% of insurance executives expect their strategy to become entirely digital over the next 3 years, compared with 39% of executives in other industries.
Source: Global Digital Enterprise Survey 2016-2017, conducted by the Economist Intelligence Unit and sponsored by DXC Technology.

Why “business as usual” isn’t

Much of what’s happening in the insurance industry today wasn’t feasible, or widely adopted, just a few years ago. Web-scale technologies, developed by companies such as Google and Amazon, were considered exotic. Consumers were just becoming comfortable with cell phones that ran “apps.” Content generated by social media users was beginning to ramp up, and the power of ecosystems pioneered by Silicon Valley giants was just a theory.

Today, that picture looks completely different. Buying habits continue to be reshaped, and expectations raised. Fueling this is a combination of smart mobile devices that consumers carry in their pockets, plus new and innovative business models, such as those that tap into the “sharing economy.” Consumers of all ages have become comfortable with electronic transactions, and they expect ease and immediacy in everything they do online. Not surprisingly, insurance professionals are also bringing those expectations to work, looking for the same level of productivity, collaboration and convenience in their roles as agents, customer service representatives and adjusters.

The technologies of artificial intelligence (AI) and analytics have the potential to further reshape the back office. With these tools, organizations can redefine and redraw traditional claims, even targeting more “valuable” clients. And as AI becomes embedded in operations, more of these functions can be automated, shifting the workforce to higher-function tasks.

Making this possible are advances in cloud computing and storage, elastic networks and sophisticated development platforms. These tools now allow virtually any company to tap into inexpensive, massively scalable computing resources. And with that foundation in place, companies can experiment more cheaply with new products and solutions and scale as needed. Also powering this trend is the as-a-service economy that has matured exponentially in recent years.

These tools of the digital economy — built on open source software and commodity hardware — enable both established and digital insurance players alike to quickly try new products, instantly market and scale those that work, and quickly eliminate those that don’t.

Security is, of course, another area that insurers must rethink. A fortress mentality isn’t effective in this new environment. Today’s enterprises must expand the boundaries, build ecosystems with third parties and make information available to many more stakeholders, both inside and outside the enterprise. This is necessary to create and
Building Blocks of Digital Insurance

Consumerization of IT and innovative new entrants are disrupting the insurance industry.

Insurance carriers are shifting from a policy-centric mindset to true customer centricity.

A seamless omnichannel experience lets customers engage however they want.

Insight and understanding enable personalization and tailored customer journeys.

Digital Insurance
Expands customer access via mobile devices, self-service websites and social media.
Delivers direct issuance, streamlined claims and value-added services.

deliver the services and experiences that consumers and employees want. Insurers must strike a new balance between enablement and protection, drawing on the fundamentals of identity and access management, while implementing them through new and emerging technological capabilities.

Companies that continue to rely on traditional business models will soon find themselves marginalized. A policy-centric, siloed business approach isn’t fast or flexible, and won’t be profitable enough to compete effectively. But it’s not that insurers don’t recognize the need to change; the challenge is in making the transformation and reaching today’s clients with a more personalized, digital experience and a broader, more flexible range of products and services that can be tailored to meet a customer’s holistic needs.

While there seems to be no end to the changes and challenges insurers and their employees face, there is still good news. Companies that respond to industry changes will be positioned to capture new growth opportunities, control infrastructure costs, and lay the foundation for a more dynamic and profitable future as a digital insurance company. The shift to digital insurance is a transformational journey that will raise the industry’s basic value proposition from simple indemnification of loss to a higher mission that supports customers’ most fundamental desires to live longer, happier and safer lives.
Portfolio shift

Traditionally, insurers have resided in the background of consumers’ lives, offering security with the knowledge that when trouble strikes, customers have a resource to call upon. Innovation tended to come from the inside, as new products and lines of business were developed and sold through agents who matched customers with the products that best fit their needs. This policy-centric point of view profited insurers for decades.

As a result of this behind-the-scenes approach, customers typically thought about insurance at only two points: when they bought or renewed a policy, and when they needed to make a claim. The rest of the time, the insurer remained largely out of sight — and out of mind. In hindsight, the time between those two events represented a missed opportunity for insurers to connect with customers. And, in the digital age, those long periods without contact, or perceived value-add, became an easy entry point for new and innovative competitors.

Insurers that shift from a policy-centric way of working to a customer-centric approach will find a wealth of opportunities to connect with customers. Some big names in the business have already begun this process. USAA, for instance, now maps its products to “life events,” and this type of navigation guides its online content as well. GEICO has created a new product to respond to customer demand in an emerging market niche: ridesharing.

Insurance companies today can offer advice, provide education and feedback and find new ways to help customers understand and reduce risk (a win for all concerned). This more holistic and integrated approach helps to establish deeper customer relationships that will prove more enduring and valuable in the longer term.

This shift is crucial, as insurers move from an indemnification-based value proposition to one of continuous value. Indeed, the concept of a core protection product has become fully commoditized, creating another entry point for new competitors. But consistent customer engagement through digital channels goes a long way toward helping insurers maintain share of mind in the marketplace and simultaneously ward off competitive threats.

The digital insurance experience is less about determining and dictating product terms and more about understanding and meeting customer needs throughout many life stages and experiences.

From data capture to data analytics

So what’s new about data? Insurers have been collecting and using it for years. The difference today is in the growing range of data types and sources, coupled with the use of new advanced analytics. The strategic aggregation and analysis of data promise to transform every part of the industry value chain.

Data now drives new product development, distribution, and marketing and sales activity, as insurers gain a more comprehensive understanding of their target markets and a 360-degree view of their customers. By using data from existing systems of record, augmented with data from external sources (including social media and,
increasingly, telematics devices) and ecosystem partners, insurers can develop a more complete picture to understand who their best customers are and gain insight into what motivates them.

Data-driven product development helps digital insurance companies bring new products to market faster and with greater chances of success. Online customer interaction opens up more of the customer’s buying journey, giving insurers an opportunity to position tailored offers. By leading customers to relevant products on the site, insurers can digitally engage in cross-sell or upsell opportunities. Better, more insightful data can be used to improve actuarial assessments and the pricing of risk. This not only drives deeper segmentation but also potentially allow insurers to price risks on a per-customer basis.

A growing abundance of real-time data offers the potential to change pricing strategy altogether in a way that benefits the digital insurance company and rewards the customer. For instance, auto insurers can use telematics data to understand a driver’s actual driving habits in a way that’s far more insightful than analyzing their credit score and demographic data. Health insurers can get a far clearer picture of an individual’s risks, based on lifestyle data collected from wearable devices. In both cases, insurers can offer incentives and channel relevant partner services to enable mutually beneficial behavior changes.

Data also holds the key to improvements in fraud detection and broader risk management. Real-time telematics data, images and video, along with sophisticated analytics and pattern matching, all help insurers identify potential fraud before or as it happens, instead of reacting to misrepresented claims after the fact.

Insurers already have the skills needed to make this shift, to become more analytical and predictive and to make better use of existing and new data. They know how to integrate external sources of data and analyze that data in sophisticated ways — that’s integral to pricing risk, something insurers know how to do well. So they aren’t starting from square one. To move forward, they must break down data silos and connect disparate systems, all while managing privacy concerns. With the right foundation in place, ingenuity is the only limit to the possibilities inherent in a data-driven approach.

While 98% of insurance companies use traditional on-premises servers, executives say they have also invested more frequently than other companies in the public cloud (96% to 82%), the hybrid cloud (94% to 83%) and collaboration software (96% to 62%).

Source: Global Digital Enterprise Survey 2016-2017, conducted by The Economist Intelligence Unit and sponsored by DXC Technology.
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From manual to digital

Paper has been making a long, slow exit from the industry. As printed materials have been phased out, a greater share of products, services and processes has made the transition from manual to automated methods. Even though many records remain in print, more sophisticated document-processing tools have helped insurers automate paper-based processes to improve speed, immediacy and quality. This “inside-out” focus on efficiency and cost is not enough in today's market.

A truly digital customer experience starts with products that are easy to comprehend and simple enough to purchase through e-applications with automated underwriting and direct issuance. This approach helps deliver the type of instant gratification consumers expect in a digital economy. Some insurers may not be able to offer complex, differentiated products in a streamlined way, but they can seek to offer a

The Value of Orthogonal Data

We are producing new data at an astounding rate. It is entirely possible that within the next 3 years, every human being on the planet will create about 1.7 megabytes of new information every second. This includes 40,000 Google searches every second, 31 million Facebook messages every minute, and over 400,000 hours of new YouTube videos every day.

At first glance, the importance of this data may not be obvious. But for the insurance industry, tapping into this kind of orthogonal (or statistically independent) data is key to finding new ways to create value.

By paying closer attention to the kinds of data people create as part of their everyday lives, insurance companies can reduce fraud, improve pricing and determine when people are going through important life changes. Using a wider variety of information is especially useful in assessing risk more accurately. For instance, behavior data from sensors can lead to better policy pricing and risk assessment.

Take, for example, the use of telematics data from sensors embedded in cars.

The raw auto telemetry data provides insurers with insight into an individual’s driving pattern, which can serve as the basis for a personalized insurance policy. This approach goes much deeper than simply knowing the driver’s education level, age and make of car.

Using driver behavior to pinpoint risk is just one way to use orthogonal data in insurance. Ultimately, new behavioral and lifestyle data sources have the potential to transform entire insurance models. Insurers can use data to improve pricing, customize coverage options, improve well-being and even prevent disaster.

Companies with a strong Analytics IQ will lead the way. Using data-driven insights, these innovators will reduce claims, and thus their customers' loss.

— Jerry Overton, Data Scientist, Senior Principal, DXC Technology
better experience or added value through their partner ecosystem. Like the change from policy to customer centricity, this fundamental shift will require insurers to reconsider how they design and build new products, how they go to market, and how they interact with their intermediaries and customers.

For one thing, digital insurers will need to offer an omnichannel buying experience that augments traditional channels with robust self-service options. Insurers must provide traditional and new outlets, direct purchasing and a highly personalized customer experience across traditional and new digital channels. Increasingly, digital channels will make use of virtual agents built on a foundation of cognitive computing capabilities. Digital insurers will also need to introduce a higher degree of automation throughout the value chain to increase straight-through processing, whether in new business, policy servicing or claims. Additionally, insurers will need the ability to quickly scale computing resources to meet the demand created by new opportunities, new product types and the high levels of online customer engagement they are likely to require.

All of these requirements speak to the need to develop a complete end-to-end digital insurance platform, including a modern API integration framework and a whole new set of persona-based systems of engagement. Insurers won’t get it right the first time. So, following the best practices of successful startups, they need to embrace lean management principles, including the concept of a minimally viable product (MVP), and Agile development methods. Business leaders, the IT organization, partners and even customers need to collaborate and continually innovate as they collectively reimagine the business of insurance.

In this changing environment, digital insurance CIOs face a daunting challenge. Attention is always focused on the next big thing, whether it’s next-generation technologies (such as blockchain) or new markets (such as East Asia); but without a digital-ready core, the company won’t benefit from industry trends — and CIOs know this. To truly digitize the business, organizations must embrace digital capabilities and evolve and mature core systems, enabling end-to-end business agility.

This dual agenda — to tackle legacy business and IT issues while innovating and building new capabilities — will be difficult to address alone. Instead, insurers should reevaluate their partnering strategy. They can no longer expect to keep up with the massive investments being made by today’s incumbent and new technology leaders. Neither can they amass all the skills and experience necessary to effect transformational change at the pace business requires. Today’s IT organization needs to transform from a builder and steward of capital-intensive IT to an integrator and aggregator of internal and external capabilities, drawing more heavily from the emerging as-a-service and API economies.

Insurance companies expect employees across the organization to develop skills in collaboration (67%), data analysis (49%) and IT literacy (47%) — an indication of the growing importance of technology to drive improved performance across the board.

Source: Global Digital Enterprise Survey 2016-2017, conducted by the Economist Intelligence Unit and sponsored by DXC Technology.
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The Insurance Industry Disruption: An LEF Perspective

On the surface, many insurance markets seem to be ripe for disruption. Insurance is a pure information business, and thus can support digital economies of scale. Many large legacy firms have built up high cost structures, and the industry continues to rely on agents and brokers that have been disintermediated in other sectors. Even insurance firms themselves disparage their unsatisfying, paper-based customer experience. Surely someone should be able to “Uber” the insurance business and provide a more modern digital experience.

But this hasn’t happened. Whether we are looking at life, property and casualty, or auto insurance, the rate of change has been slow. There aren’t any great Silicon Valley insurance startup successes. New business models based on customer driving habits or personalized health probabilities have been led by incumbents, slow to catch on and modest in their ambitions. Overall, because many forms of insurance are purchased annually — and typically used even less frequently — there seems to be a great deal of inertia in the system.

What will it take to change this? While we see some promise in the peer-to-peer insurance segment — perhaps through new companies such as Uvamo — we are more inclined to look for new firms to succeed in new areas. New data sources from an exploding range of internet of things (IoT) devices, new business models based on a sharing economy (Uber, Airbnb et al.), and the application of industry-specific machine intelligence will generate new products and new challengers in insuring things such as self-driving cars, drones, robots, self-service healthcare, blockchain transactions and more. Today’s leaders must resist complacency. At some point, disruptive shifts seem inevitable. Those insurance firms with their digital house in order will be best positioned to respond.

The Leading Edge Forum (LEF) is the independent research arm of DXC Technology.
Adapting to the shift

Insurance customers of the past were passive buyers; today, they’re active participants. They review insurance products and report experiences through their social networks. They are self-directed and will both offer and accept support from one another. Their buying journey is their own, and they demand new levels of access, mobility and personalization. They want to engage on their terms and will quickly drop any service provider that is unable to give them the experience they want. It’s a buyer’s market, with new and innovative providers entering every day.

This shift in power means that insurers need to rethink every aspect of their business: their relationship with both customers and partners; the products and services they bring to market; how they engage and enable collaboration; how they innovate; and how they harness the power of service-provider ecosystems.

It can be difficult to know where to start. Experimentation abounds, while systemic transformational change remains elusive. Technology, the enabling hardware and software, is proving to be the easy part, while people, process and culture are proving to be much more difficult. With that in mind, in our extensive work with digital insurance clients, we see the most progress coming from these areas of focus:

Mastering engagement. Insurers need to develop a strategic vision of digital insurance with the ambition to change the basic value proposition from one of commoditized indemnification to one of rich, continuous value. Imagine a medical insurer that helps you eat, sleep and exercise better, or an auto insurer that helps you and your family become safer drivers. To do this, insurers need to develop products and services that fill in the “white space” between purchase and claim – and not just to fill the space, but to help customers enjoy happier and more productive lives with lower risk. This level of engagement requires access to broader and deeper datasets, as well as seamless interaction among customers, insurers, intermediaries and partners. The result is a highly personalized, tailored experience throughout the customer life cycle, including turning beneficiaries into word-of-mouth advocates and even new customers.

Mastering understanding. This step is essential to making the shift from a risk table-based, policy-centric business to one that is behavior-based and customer-centric. It begins by investing in a new breed of systems of analysis and embedding analytics into every aspect of the value chain. It means developing a deeper and richer understanding of market needs, at both a segment and individual level. This understanding should not come from a single point in time, but rather grow and change throughout the customer’s relationship, on an hourly, daily or weekly basis. These same systems and tools can be turned inward to better understand the business, operations and employees, creating insights that can be used to incrementally improve and grow.

Mastering consumption. To develop a true omnichannel experience for customers, agents, brokers and internal stakeholders, an insurer needs to embrace the concept of the service-enabled enterprise and the API economy.

This begins by focusing on ways to make the company easier to do business with and envisioning a customer’s buying journey across channels. Organizations must move away from an in-house IT mentality to one that embraces external infrastructure, cloud computing, as-a-service options and mobility.
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By 2019, usage-based insurance enabled by internet of things will account for at least 15% of the global vehicle insurance market and 10% of the global home insurance market.


Mastering process. With the right technical pieces in place, organizations should start the work of developing an IT-centric set of initiatives with the goal of becoming more open, agile and successful in the digital economy. All business processes should be evaluated to the tune of “cheaper, better, faster.” By continually tweaking processes to improve efficiency and make room for innovation, companies can turn their back-office operations into a true differentiator.

Success in these endeavors will allow an insurer to benefit from the burgeoning innovation community, and avoid being consumed by the ever-growing range of new entrants to the market.

Starting the journey

While any one of these shifts would be a challenge to address, today’s insurers must deal with them all at the same time, further raising the stakes. However, the shift to digital insurance is worth the returns it can offer and, more importantly, is essential to survival.

Digital insurance enables a symbiotic relationship between carriers and customers, a relationship built on sharing and trust that leads to continuous interaction and real-time delivery of value. A customer-centric view, powered by new forms of analytics and automation, allows insurers to meet customers’ real-world needs, while at the same time growing and operating a more sustainable and profitable business. If insurers are slow to make the shift, plenty of eager market entrants are willing and ready to take their place. But by embracing the right strategy and working with the right partners, today’s insurers have the knowledge, ability and capacity to enter this changing space with confidence.
How DXC and Its Partners Can Help

DXC Technology knows that insurers are challenged to make changes in every part of the business. With the global insurance industry aligning around a shared vision of the future and a common set of transformational priorities, speed and quality of execution will differentiate the leaders from the rest. Our mission is to enable your digital transformation journey, providing you with a competitive edge that will ensure continued success.

To accelerate time to innovation, DXC is investing and partnering to bring to market new, innovative digital insurance solutions. Our goal is to reimagine the business of insurance, with an emphasis on customer experience across new business, policy servicing and claims. The cornerstone of our approach is our OmniChannel digital customer engagement platform. Built around a complete set of reference APIs for insurance, our platform allows organizations to rapidly bundle and deploy innovative digital solutions tailored to the needs of policyholders, agents, advisors, customer service representatives and adjusters.

Using our platform, we aggregate IoT data and machine learning to enable behavior-based underwriting and provide a foundation for continual customer engagement. Harnessing the combined power of mobility and self-service, we reduce average claims-handling times from 2 weeks to under 2 hours. In the call center, we dramatically reduce policy-servicing costs using a combination of advanced data analytics, artificial intelligence and robotics.

We know that these new digital capabilities are of marginal value unless they’re integrated, end to end, with a digitally enabled set of core systems and components. That’s why we deliver a portfolio of cloud-native components, addressing product, policy, claims, billing and reinsurance for insurers in every region. Extending our platform capabilities even further, we’re curating an ecosystem of incumbent partners and new insurance technologies.

We understand that to fully address the industry’s dual agenda, we must help you tackle your legacy IT footprint. DXC’s market-leading business process services capabilities allow insurers to simplify their back offices, reduce costs, improve agility and free up embedded capital. Our application services, inclusive of data migration and conversion, complete the journey.

Having served the insurance industry for 45 years, DXC has over 18,000 employees dedicated to serving 1,500+ insurance customers worldwide. Whether you’re a broker, carrier or reinsurer, whether you’re in life, health, wealth, or general insurance, and whether your business is in personal or commercial lines, we are ready to engage.

Now is the time to act. Let us help you innovate, transform and win.
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