



## 8 Innovation Trends for Digital Insurance

— Mark Palmer, Robert Tartaglia, and Rob MacNeil

After years of anemic IT innovation in the insurance industry, momentum is now dramatically shifting towards digital transformation. Three forces are driving this change:

### 1 | THE MILLENNIAL GENERATION

To start a digital transformation, there is no longer a need to pursue high risk, costly, resource-distracting, multi-year journeys to replace older legacy systems.

Millennials, born between 1980 to 2000, grew up with Amazon, Google, and social media—all accessible via mobile devices and computers in their hands, on their wrists, and in their bedrooms and classrooms. They have an entirely new framework for customer interaction. All generations benefit from highly customer-centric, environment-driven digital technologies. Consumers now expect to buy what they want when and where they want, with the ability to find it at the best price.

### 2 | DIGITAL TECHNOLOGIES

The ubiquitous adoption of digital technologies is providing new opportunities for additional premiums, improved customer experience, increasing governance, and better risk selection and loss prevention. To compete, insurance companies must find a way to access and process telemetric data from devices and sensors, stream real-time data from social media and external sources such as weather, and monitor data from the explosion of wearables in the public and industrial domain. IT systems developed in the past simply did not envision the volume, velocity, and variety of this data.

### 3 | REGULATION

The third force all insurance companies must address is finding better and faster ways to meet the ever-increasing demands of the regulatory environment. Digital innovation will drive new regulation and increased pressures on insurance organizations to efficiently and effectively meet these requirements.

As a result of these drivers, we see eight trends developing in the insurance industry:

**1: DIGITAL CHANNELS WILL REPLACE AND AUGMENT PHYSICAL CHANNELS.**

A 2015 Bain survey of insurance companies projected that in the next 3 to 5 years digital channels will continue to significantly replace physical channels. The survey found that 20–40% of physical activities in insurance will be transitioned to digital. Specifically, claims handling and management, customer feedback and resolution, payments, pre-purchase and purchase, renewals, and servicing will become digital first, followed by other functions. This transition will require incremental IT and integration transformation, which is the focus of four of the eight trends.

**2: MILLENNIAL PREFERENCES WILL DRIVE APPLICATION DESIGN.**

If the success of insurance companies depends on millennials, and millennials only want to interface with the firm digitally, what does that mean for IT systems? Insurance companies must turn the IT behind their user experience upside down. Legacy systems were designed for human worker workflow, which assumed the use of phones and postal mail and that customers were willing to wait for a response. These assumptions are no longer true, and the new insurance customer demands information and service on mobile devices and the web, requiring a completely different application user experience design.

**3: COMPANIES WILL EMBRACE AND EXTEND THEIR LEGACY IT INFRASTRUCTURE.**

In this brave, new, looming technology world, can insurance companies afford to simply dump their legacy systems? Of course not! But embracing and extending decades of technology debt requires innovation. Luckily, technologies now exist that can extend the life of legacy IT assets—and increase return on investment. To start a digital transformation, there is no longer a need to pursue high risk, costly, resource-distracting, multi-year journeys to replace older legacy systems. For example, one hot technology trend is the use of in-memory data grids to move and cache back-office data for new, innovative, digital applications. Data grids reduce load on existing systems and can save tens of millions of dollars while reducing the need to buy additional storage.

**4: DIGITAL CUSTOMER RELATIONSHIP MANAGEMENT AND DIGITAL INTEGRATION WILL BECOME A NECESSITY.**

Customer relationship used to be a purely human practice, but moving forward, relationship management must be digital. Modern insurance call centers must have a seamless, real-time, 360-degree view of social media engagement, mobile application interaction, and geo-awareness from sensors making up the Internet of Things (IoT). This granular information is hard to come by using legacy systems. Modern integration infrastructure that uses web APIs, cloud services, and IoT aware connectivity, as well as traditional integration infrastructure and data integration, is required.

**5: IOT DATA WILL INCREASE THE NEED FOR STREAMING ANALYTICS AND INNOVATION.**

Insurance companies are now capturing new data from the “Internet of Everything.” For example, wearable-device data allows insurers to offer discounts for healthy behavior. But these activity-centric products generate activity-type data. They require the ability to process and analyze massive amounts of streaming information, presenting new technical challenges. How can streaming data be efficiently analyzed? Which streams must be archived? How will privacy be maintained? How will insurance companies deal with the volume of data?

**6: FOCUS WILL TURN TO ALGORITHMIC RISK ASSESSMENT.**

Digital insurance data is fast moving, like streaming data in capital trading markets. Insurance companies will increasingly apply real-time algorithmic computing technologies born on Wall Street to the onslaught of streaming data from GPS, mobile, and wearable devices. But unlike Wall Street, insurance companies are not building low-latency automation, but instead using continuous algorithmic analysis to continuously search for sales opportunities, manage risk, and ensure subscriber loyalty.

**7: DRIVERLESS CARS WILL POSE NEW FORMS OF RISK THAT WILL BE MANAGED USING DATA AND ANALYTICS.**

As Elon Musk and Google continue to lead driverless car innovation, the insurance industry must respond. Risk management will not be the same in the digital era—not only in terms of forecasting, but in managing and mitigating risk in real time. If an automated driver feature in your car causes an accident, who is at fault? The Tesla engineer who wrote the software? You, who didn't touch the wheel? What fault does the driver in the other vehicle have?

What is the obligation of all insurance companies to gather and analyze massive amounts of streaming forensic data from insured driverless cars in order to decide? How can monitoring streaming data mitigate risk in real time? The digital insurance company must invest in capturing these new forms of data, and in data science to analyze it for forensics, patterns, and predictive actions to decide how to respond to these regulatory pressures.

**8: THE NEW DIGITAL DATA SCIENTIST WILL STEP TO THE FOREFRONT.**

Data scientist used to be synonymous with actuary in the insurance industry. But in the new digital insurance era, data science is being applied to IoT data for forensics, historical data for predictive analysis, and location awareness for risk mitigation. These are new forms of data science that will rise to the forefront of the modern insurance firm.

TIBCO has developed a reference architecture that delivers a solution to address these insurance industry trends, the TIBCO Digital Insurance Solution Architecture. Learn more about becoming digital at [www.tibco.com/destination-digital/roundtable](http://www.tibco.com/destination-digital/roundtable)



**Global Headquarters**  
 3307 Hillview Avenue  
 Palo Alto, CA 94304  
 +1 650-846-1000 TEL  
 +1 800-420-8450  
 +1 650-846-1005 FAX  
[www.tibco.com](http://www.tibco.com)

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