# NAVIGATING THE DIGITAL JOURNEY IN INSURANCE

As various industries reap the benefits of digital transformations, the insurance sector needs to adopt technology as a hedge against ever-increasing risks. In this article, we explore why insurers need to turn to data and analytics to not only stay afloat, but also meet the rising expectations of consumers.



The insurance industry safeguards diverse assets and covers multiple risks, including oil and gas facilities in the deep sea, subsurface structures in megacities, employees and cyber systems of digital enterprises, commodities and perishables in transit across continents, and the reputation of risk managers.

The risk quotient, however, increases exponentially with the meteoric rise in population and economic activity, and the corresponding impact on the environment and society. In addition, stringent solvency regulations, low-yield assets, penalties for negative spread, and fierce competition only increase the odds for the insurance industry. In such a scenario, global insurance companies can reduce their liabilities by adopting a holistic approach to investment structures. While insurance enterprises can redeploy capital based on risk-adjusted metrics, cross-border hedging and treasury management strategies still carry risks.

In such situations, digital technology allows insurers to transform core systems by offering innovative solutions for unforeseen risks. It helps enterprises keep pace with the social, technological, environmental, economical, and political landscape by anticipating requirements and identifying opportunities in real time. Seamless connectivity, automation,

Simulation models facilitate risk evaluation, which helps insurers offer adequate coverage and to better serve high-risk segments. Advanced modeling helps forecast diverse risk scenarios, from damage due to faulty plumbing in a high-rise building to production shortfall in a wind farm. and data analytics alter the entire insurance value chain, which comprises products, underwriting, distribution, and claims management, across both personal and commercial lines.

#### Insurance as a commodity

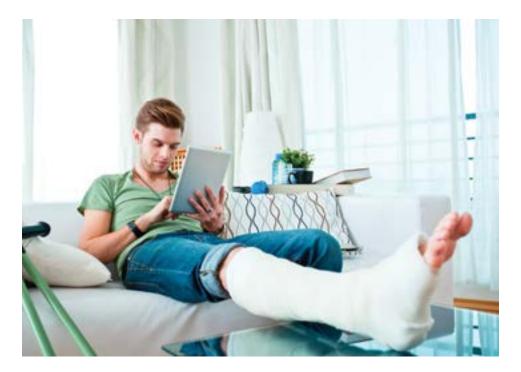
Price cannot be the only differentiator in insurance. Unlike comparison shopping for books, shoes, and phones, a policy is not a standardized product that can be easily compared before making a purchase decision. Risk protection requirements vary from one individual / business to another. Moreover, due to differences in liability categories, deductibles, exclusions, restrictions, riders, and claim settlement practices among insurance carriers, insurance cannot be commoditized. Yet, customers accustomed to the convenience of online comparison shopping expect insurance quotes to be offered à la carte.

Digital channels help insurers offer a premium vis-à-vis cost of risk-mitigation comparison to help customers make informed decisions. It is not a good practice to strip down insurance products to accelerate the quotation process or gain a price advantage. A denial of claim due to insufficient coverage will incur a prohibitive cost for the insurer as well as the insured. Further, millennials share their experiences on social channels without the back story, only adding to insurers' woes. Digital channels should thus save them effort, time, and money while providing customers with visibility into service levels. Every policy must fulfill its objective: Ensure adequate protection and facilitate smooth settlement. Consequently, purchase of an online health or auto insurance plan can mimic grocery purchases from Walmart.

## Smart agents as underwriters

Claims transformation programs powered by automation tools and intelligent bots can raise the bar in customer experience. Bots will eventually eliminate middlemen — such as insurance brokers and independent agents — who are quickly being made redundant by the do-it-yourself millennial generation. Significantly, digital intermediaries rationalize costs, reduce turnaround time, and boost efficiency across the underwriting, premium collection, and claims settlement processes.

Smart agents can be integrated with big data analytics and social media in order to enhance marketing and sales. Chatbots blend contextual content with artificial intelligence to enhance customer service through meaningful voice conversations, instant text messaging, and proactive content distribution.



Automated processes and seamless collaborations ensure 'Zero Distance' to the customer. However, such disintermediation shifts the responsibility of brand building and marketing to the insurance carriers. The online product suite should address the broad spectrum of insurance needs, engage customers who 'search' for products, share comprehensive information to replace advice from agents, and enable equitable comparison to close a new policy. For customers who prefer interactions with agents, enterprises should enhance the independent agency model with a digital sales ecosystem for real-time collaboration.

#### Insurance as a service

The combined use of telematics, sensors, global positioning systems (GPS), and digital devices enhances the value of insurance products. Connected homes with smart security solutions benefit from lower rates on

policies as well as prompt service in the event of a security alert. Progressive Corporation, National General Insurance, and several other leading auto insurers offer behavior / usage-based insurance products that reward safe driving and low usage. Real-time monitoring of vehicles minimizes the risk of theft and ensures swift response to accidents. Further, the social benefits of pay-as-you-drive auto

insurance include fewer accidents, less traffic congestion, and reduced carbon emissions.

Digitization is unleashing new business models and products that redefine service. Swiss Re collaborates with local insurers and the Syngenta Foundation for Sustainable Agriculture (SFSA) to provide index-based weather insurance coverage to farmers in Kenya and Rwanda. The project, funded by the International Finance Corporation, offers insurance as a business service to marginal and large farms by using weather stations for automatic claims disbursement. The agriculture micro-insurance model covers inputs as well as harvests of crops. Weather data from monitoring stations is used to determine insurance payouts during a crop failure caused by excessive rainfall or drought. Payment is made via a mobile transfer service without farm visits.

## Data as an asset

Risk managers and insurance professionals need visibility into risk characteristics, claims statistics, and emerging threats, in order to target customer micro-segments, accurately underwrite policies, and effectively manage claims. To this end, the Internet of Things, social platforms, and mobile apps accumulate and disseminate contextual information. Additionally, real-time data feeds from a digital ecosystem provide visibility into potential risks, which pave the way for a superior customer experience across the insurance life cycle — initial research, moment of purchase, and settlement.

Data-oriented enterprises collect

The Internet of Things, social platforms, and mobile apps accumulate and disseminate contextual information, while real-time data feeds from a digital ecosystem provide visibility into potential risks. demographic, behavioral, asset, location, and other types of information in comprehensible formats, and provide interfaces to consume / monetize this data. Digital insurers become more responsive by listening to customers. For instance, a mobile application from **Progressive Insurance** uses a digital format of a driver's license to generate an auto insurance quote for policy seekers. Several insurers leverage apps to

improve auto claims management; wherein policyholders initiate the claim from the accident site by uploading photos on the spot. In addition, drones are now being used to accelerate the assessment of damages when site visits by an appraiser are unsafe or time-consuming.

# Analytics as a catalyst

Analytical tools capitalize on the customer's digital trail — such as telematics apps, connected home devices, health-monitoring wearables, spending patterns, and social interactions — to generate real-time risk profiles. Credit risk scores help insurance

companies determine liability limits and deductibles, and pre-approve plans. Moreover, accurate risk assessments help insurers offer discounts and bundle requirements / products to minimize the cost of coverage.

Predictive analytics platforms connect the dots between diverse data sources to anticipate risks, including fraudulent claims. For example, data from a telematics device plugged into a car monitors driving data, while also transmitting its location data. Analytical solutions integrate this data with information from other sources, such as healthcare records and traffic monitoring systems, to identify and prevent processing of false claims.

Simulation models facilitate risk evaluation while minimizing dependence on old claims records. This helps insurers offer adequate coverage and to better serve high-risk segments. Advanced modeling helps forecast diverse risk scenarios, from damage due to faulty plumbing in a high-rise building to production shortfall in a wind farm. Most importantly, it prevents overselling, especially in health insurance. Brokers often pitch wrong plans or oversell coverage. Insight-driven pricing models make use of an applicant's data and consolidated statistics to rationalize the cost of personalized healthcare plans.

Big data analytics helps configure products with benefits that transcend policyholders and financial criteria. Insurance solutions that align premium rates with a customer's driving history, lifestyle, well-being, and energy efficiency help achieve socio-economic goals through investments in wellness products, hybrid vehicles, green buildings, energyefficient industrial equipment, and renewable energy.

The insurance industry lags in digital adoption. Digital tools are not used uniformly across business functions and lines of business. A digital transformation will help insurance carriers bundle products with an added layer of experiences, configure new forms of coverage for emerging risks (including self-driving fleets and cybercrimes), stave off competition from non-insurers and peer-to-peer insurance companies, and stabilize industry growth.



Digitization is redefineing services, such as Swiss Re collaborating with local insurers and the Syngenta Foundation for Sustainable Agriculture (SFSA) to provide index-based weather insurance coverage to farmers in Kenya and Rwanda.

# About the Author



Pankaj Kulkarni

If you wish to share your thoughts on this article or seek more information, write to us at Insights@infosys.com