

Disruptions in the property and casualty insurance value chain

Banking, Financial Services and Insurance



Abstract

The property and casualty insurance landscape is changing rapidly with technology-led disruptions making ingress. Customers are exposed to a plethora of products, which, in turn, is translating into a behavioral shift in the market. While generally, most of these impact vectors assist in the success of insurance companies worldwide, if not managed well, it could derail progress. Amid these disruptions in property and casualty insurance, staying competitive will require more than a few automated processes, and insurers need to rethink their fundamental business models. The fierceness of competition has driven insurers to leverage technology for transforming their legacy systems and processes and appealing to a customer base that is known for its volatile loyalty. Here, embracing digital technologies can help insurers tap into new sources of value and gain strength from these disruptions. This paper examines some of the disruptions in the property and casualty insurance space, along with how insurers can adopt and adapt to the ever-changing digital landscape to remain relevant in the market.

Ripe for change

In 2020, non-life insurance premiums grew by 1.5%, which when adjusted for inflation, can be estimated at \$3.5 trillion¹; evidently, the market is witnessing several disruptions due to accelerated changes in technology. That said, insurtechs are gaining ground in changing the panorama of the property and casualty insurance market. For large insurance companies, these changes can transform some of the age-old business processes and methods used across the insurance value chain. Bearing in mind the resistance to change in any established industry, the success of insurance giants lies in the 'change' as opposed to legacy and brand value which were once positioned as success factors. While critics continue to defend their aversion to new technology and skepticism towards disrupting proven business models, embracing change and evolving is the only way for legacy insurers to stay relevant and prevent oblivion.

To begin with, insurers must harness the potential of data to prevent fraudulent claims, classify and triage claims, identify customer flight risk, and recognize new markets. Underwriting can be made effectively accurate, and risks priced by analyzing real-time consumer data rather than using indicative credit scores data. The internet of things (IoT) can be leveraged to address and prevent perils such as theft, fire, and any other instances through alerts to the customer and also authorities. There is a host of other opportunities for insurers to hedge the risk of a higher operating ratio by embracing technology-centered business models and digital technologies across the value chain.

Disruptions in the market are varied, primarily because of the entry of smaller players who have digital-native operating models that optimize cost as well as enhance customer experience. There are new product offerings such as insurance policies to protect against cybercrime, autonomous vehicles, and connected homes. Besides, start-ups with business models like peer-to-peer (P2P) insurance and usage-based insurance (UBI) are gaining traction with newer players like Lemonade, Metromile, Shuidihuzhu, Zego, and tech giants like Amazon backing through investments. Disruptive technologies like telematics, blockchain, artificial intelligence (AI), and machine learning (ML) are picking up pace

[1] Insurance Information Institute, Inc., World Life And Nonlife Insurance In 2020, March 2021, Accessed January 2022, <https://www.iii.org/publications/insurance-handbook/economic-and-financial-data/world-insurance-marketplace>

and making aggressive forays into the insurance space, with a focus on improving the speed of claims, increasing the accuracy of underwriting risks, and enhancing customer experience.

Disrupting the traditional business models

The prerequisite for gaining a competitive edge in the property and casualty insurance space is reimagining the core business models to maximize value creation. P2P insurance is one such model that is gaining ground owing to its reduced cost of insurance through hedging of fraud risk and low administration costs. In this model, the payout of fraudulent claims which leads to financial loss is eliminated. It works on the premise of self-selection and community environment. Unlike traditional insurance, the collected premium minus the claim payout is distributed among the members at the end of the tenure. Premiums are linked to claims payout, whereby lower premiums are charged to members without claims.

Global Market Insights Inc. has recently added a new report on usage-based insurance, which estimates the market valuation for UBI to cross \$125 billion by 2027². UBI fosters the use of advanced telematics technologies for calculating insurance premiums based on driver behavior. The data received from this technology can be mined to optimize underwriting processes, lower risks, and improve relationships with customers. The advantages are better customer engagement and upsell or cross-sell opportunities, risk-hedging through a pool of low-risk drivers, and competitive pricing.

Leveraging technology enablers

We believe insurers will have to adopt the below-mentioned disruptive technologies to brace for change and stay alive in the competition.

Blockchain is emerging as the future of business transactions, and the blockchain market in the insurance industry – valued approximately at \$16.99 million in 2016 – is anticipated to grow at a healthy rate of more than 84% over the forecast period 2017-2025³. Blockchain has the potential to remove intermediaries, prevent fraudulent activities, and track records efficiently. Across the insurance value chain, blockchain can impact areas such as claims and monies-related functions significantly. The technology can eradicate paper and electronic transfers and automate processes, including reconciliations.

AI when coupled with data and algorithms can be used to train systems for emulating human behavior and allowing machines to make human-like decisions. This technology can be infused into the insurance value chain, mainly in the distribution and claims administration spaces. The adoption of AI limits human interference in the management of exceptions and decision-heavy cases. AI can be used to analyze insurance data to predict potentially fraudulent patterns, correct pricing and reserving, along with timely intervention to prevent further losses, thereby capacitating insurance companies to remain above the water in the sea of aggressive competition.

Robotic process automation (RPA) combined with AI will help insurance companies remove repetitive tasks, eliminate human intervention, and boost network systems, databases, and process

[2] GlobalNewswire, Inc., Usage-based Insurance Market to reach \$125 billion by 2027, June 2021, Accessed January 2022, <https://www.globenewswire.com/en/news-release/2021/06/03/2241169/0/en/Usage-based-Insurance-Market-to-reach-125-billion-by-2027-Global-Market-Insights-Inc.html>

[3] MarketWatch, Inc., Blockchain In Insurance Market Outlook to 2030 By Industry Growth Factors, Latest Technology, Size, Consumption, and Industry Updates, November 2021, Accessed January 2022, <https://www.marketwatch.com/press-release/blockchain-in-insurance-market-outlook-to-2030-by-industry-growth-factors-latest-technology-size-consumption-and-industry-updates-2021-11-15>

applications, thereby allowing the human force to focus on tasks that require empathy and customer focus.

ML can assist insurers in aggregating and interpreting data to identify areas for product development and innovation across the value chain. Along with predictive analytics, ML can be used to allocate reserves on claims accurately and present the claims adjustors with the correct settlement amount.

What do the insurers need to do to stay ahead of the competition?

Phone-based applications and effortless access to digital services pose a challenge to traditional models. Major insurers across the globe are appreciative of the fact that digital strategies should be at the core of the business. To that end, many insurers are investing in in-house digital labs to counter the challenges in the market posed by insurtechs that are gaining prominence slowly but steadily with their innovative and digital-native offerings. Countering the disruptive forces prevalent in the market requires insurers to stay relevant through innovative products, seamless claims processes, digital self-management policies, and effective strategies for combining customer-centric processes and technology. Furthermore, insurers must:

Build a roadmap for digital interventions across the insurance value chain: While the investment in infusing new-age technology at an organizational level may be high, having a clear roadmap with the customer and organizational goals in mind will help the insurers stay relevant in the ever-changing world of technology. Automated underwriting, phone-based applications to manage policies and claims, conversational AI chatbots, and connected ecosystems are some of the areas where insurers can gain an edge.

Integrate intelligent platforms for 360-degree customer insights: Many insurers still use legacy systems and paper-based processes for underwriting. Across the value chain, there are multiple systems that are not integrated with underwriting and claims using different platforms in the same organization, and manual handoffs are prevalent. It is time for insurers to integrate systems and infuse a machine-first operating model by leveraging an ecosystem approach to bring in expertise and experience. This way, they can fast-track the process of replacing legacy systems and transitioning policy and claims data.

Invest in data mining and insurance data analytics coupled with ML: Despite robust data collection abilities, not many insurers harness the insights hidden within the terabytes of data available. Predictive analytics and ML can be used to prevent fraud, lower risks, and provide a delightful customer experience with quick claims settlement. This will allow insurers to price their products competitively and lower claims expenses for staying profitable.

Build ecosystems: Insurers need to identify and collaborate with partners by assessing opportunities within and outside the organization. To meet the need for technology capabilities and gain expertise, insurers are required to collaborate with organizations that are aligned with their strategies and competencies. For instance, the claims ecosystem may consist of brokers, garages, tow companies, hospitals, assessors, and rental car companies. Here, strategic alliances with insurtechs or similar service providers can offer insurers the advantage to leverage the power of connected ecosystems.

Looking ahead

It is only fair to say that with the tremendous shift created by digital disruptions, insurers must reimagine and realign their businesses quickly in order to tackle the challenges posed by these



disruptions. Adoption of new technologies through platform modernization, digital customer interfaces, data harnessing to build prediction models, and strategic digital partnerships are a few things that insurers can consider and include as a part of their transformation roadmap. Needless to say, ignoring these and relying on legacy systems and manual-intensive insurance processes will slowly but steadily drain the market share and put them on the path of oblivion.

About the author

Adiel Karthak

Adiel Karthak leads the Property and Casualty Centre of Excellence for BFSI - CBO in TCS. He has 17 years of experience in P&C insurance, across multiple lines of businesses, with expertise in domain-led transformations. His experience, which spans across the UK, EU, US, and APAC, includes domain consulting, solution architecture, service delivery, analytics, visualization, and capability development. He is a post-graduate from NIFT, Delhi; BA(Hons) from Delhi University, and currently completing his post-graduate program in Data Science and Business Analytics from Texas McCombs, UT Austin.

Awards and accolades



Contact

For more information on TCS' Banking, Financial Services, and Insurance (BFSI) unit, visit <https://www.tcs.com/banking-financial-services>, <https://www.tcs.com/capital-markets> and <https://www.tcs.com/insurance>

Email: bfsi.marketing@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is a purpose-led transformation partner to many of the world's largest businesses. For more than 50 years, it has been collaborating with clients and communities to build a greater future through innovation and collective knowledge. TCS offers an integrated portfolio of cognitive powered business, technology, and engineering services and solutions. The company's 500,000 consultants in 46 countries help empower individuals, enterprises, and societies to build on belief.

Visit www.tcs.com and follow TCS news [@TCS_News](https://twitter.com/TCS_News).

All content/information present here is the exclusive property of Tata Consultancy Services Limited (TCS). The content/information contained here is correct at the time of publishing. No material from here may be copied, modified, reproduced, republished, uploaded, transmitted, posted or distributed in any form without prior written permission from TCS. Unauthorized use of the content/information appearing here may violate copyright, trademark and other applicable laws, and could result in criminal or civil penalties.

Copyright © 2022 Tata Consultancy Services Limited