# Chapter 74
# COVID-19 Triggers a Paradigm Shift in Technology for Insurance Industry

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**Abstract** As the global economy grapples with the advent of novel coronavirus and its variants, the aftermath has left all industries with ongoing uncertainties and incalculable loss of life and livelihood in most countries worldwide. In such unpredictable situations, the insurance industry and governments worldwide have become the prominent source of optimism to sail through the situation. This applies to the insurance industry globally, which is currently in the grip of fear due to the COVID-19 outbreak and anticipating significant economic slowdown and hardship because insurance rides on the back of other Industries. Therefore, to overcome a few of the tenacious roadblocks due to the COVID outbreak, Insurers will be forced to reassess all aspects of their business life cycle and take necessary steps to continue operations with minimum disruption. Precisely, the impact of COVID on General Insurers and Life and Health Insurers varied depending on the lines of business, product lines, and a bouquet of benefits offered by the insurers. The pandemic has taken a hit on new gross written premiums on specific lines of business, such as medical, travel, commercial, and business insurance. Few lines of business such as motor and home have remained muted during the COVID timeframe. However, the claims volumes for personal insurance (e.g., motor) have significantly decreased due to the lockdown and travel restriction; the industry has witnessed the highest claims volumes in life and health compared to the past several decades. They say, "As every dark cloud has a silver lining," it has given an opportunity to many insurers to develop new products (e.g., Pay Mile Auto insurance) and push toward greater productivity, i.e., digital capability across product range which will result in an elevated position to understand and address to the customer and intermediary self-service (such as Portals) and implicit and explicit needs. Notably, the Insurance industry is likely to lean toward offering personalized yet custom-made products and services, which are sharply focused on preventative care and embracing digitalization across the value chain. Besides enabling scalability and connectivity, insurers are strategically

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focused on digitizing the core of the business and cloud implementation; automation across the insurance value chain is necessary to compete successfully with new innovative product development or inclusive business models. Around the globe, the insurance industry is continuously putting a deep focus on revitalizing the technology paradigm to grow and strive to achieve cost-effectiveness amid emerging markets, rapidly changing economic conditions and stiff competition from Insurtech. According to industry experts across geographies, growth may be a balanced blend of preventative and protective approaches, with a gamut of new and improved services and products, and insurers are deeply fostering redefining service-oriented strategies and innovative products.

**Keywords** COVID-19 · Insurance · Digital · Blockchain · Artificial Intelligence · Technology · Insurtech

## 74.1 Current 'Global Insurance Stance'

The global insurance penetration is 7.3%, as per reports from Statista [15]. Around the world, insurers are facing tough economic challenges in terms of flat interest rates (primarily for life insurers), rising inflation, negative yields from the government bonds and corporate market that are driving the industry's Return on Investment (ROI) and Return on Equity (ROE) down. Consistent price hikes for raw material in the construction business, rental vehicles (personal and commercial usage), and auto parts (computer chips for Smart cars and semiconductors) are pushing expense lever threatening to drive up the insurer loss cost in the year 2022. As per the survey from Willis Tower Watson, the implementation of International Financial Reporting Standard (IFRS 17) , which is due to come into effect in January 2023 likely to cost global insurers between USD 15 billion and USD 20 billion.

As per the reports from McKinney [4], the insurance industry is projected to be a $10 Trillion industry by 2030. Also, {McKinney reports} highlighted that across the world, Insurtechs are predominately offering last-mile capability driven through digital innovation and integration of disruptive technologies, paving the way to multiple lines of business and product lines within the Insurance value chain [11]. Notable investments in Insurtechs worldwide are showing an upward trajectory from $1 billion in 2004 to $7.2 billion in 2019 to $14.6 billion in 2021 (as per the recent report in Deloitte [6, 12]). Around 40% of Insurtechs and a few big insurance carriers are primarily targeting disruptive distribution channels and radical marketing strategies, fueling them to meet the needs of end customers and improve the customer journey through a digitally enhanced and enriched client experience [5]. In a pre-COVID era, though digitalization and technology were in place across the insurance value chain for many insurers after COVID, an unprecedented shift in technology paradigm and adoption of technologies has accelerated to the maximum to do the business, and it has been no more an option for any insurer globally (Fig. 74.1).

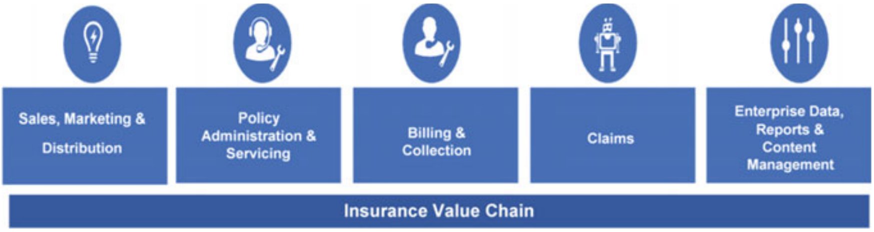


**Fig. 74.1** Insurance value chain

There are several promising examples in which Insurers levered emerging technologies and reaped the benefits of early movers in the given space. For instance, Allstate insurer have come up with a concept of connected cars which will offer competitive premiums with telematics. Similarly, AIG has developed ‘Attune,’ a data intelligence for underwriters. Aetna has implemented fraudulent claim detection using advanced machine learning. Based on the recent survey from McKinsey, Insurtechs and some big insurer carriers would be focusing on marketing and distribution channels in the coming time.

Another factor continuing to cut General Insurance insurer profitability is the financial losses from climate risks. As per the Deloitte report [12] of 2021, globally projected insured natural disaster property losses amounted to USD 40 billion until June. This has resulted in many insurance regulators across the globe launching their initiatives. In the United States, it is anticipated to outline new direction banking upon Technology level on how insurers should be releasing and dealing with financial risks spawn due to climate change.

Coming on to the Global insurance merger and acquisition (M&A) domain, deals will be strategic rather than opportunistic, with the help of sizable capital infusion by private equity investment firms already prevalent in the insurance brokerage space. Life and Annuity (L&A) Insurers who are still deemed legacy insurers are more likely to explore inorganic growth and acquire Insurtech in 2022 than General Insurance Insurer. The latter is already actively engaged in Insurtech investment. Recently Voya Financial sold its annuities, life, and wealth businesses and doubled down on retirement, asset management, and group insurance. MassMutual, meanwhile, divested its US direct-contribution business, Oppenheimer Funds, and its businesses in Asia.

However, with the points mentioned earlier, the global insurance market is expected to exceed US$7 trillion in premium terms by mid-2022 due to rising risk awareness among consumers and businesses [17]. They were the leading insurer institute [18], firmly anticipating that the global economy rebound steadily in 2022 from the COVID-19 pandemic because of the accelerated pace of vaccination drive and global fiscal stimulus through government bodies [1]. However, this recovery may be impacted by the problem of upcoming virus variants (Delta, Omicron). Witnessing a drop of 2.9% in real growth in 2020, the institute estimates total global insurance premiums [8] will slow to 3.3% in 2022 and 3.1% in 2023. Slower economic growth

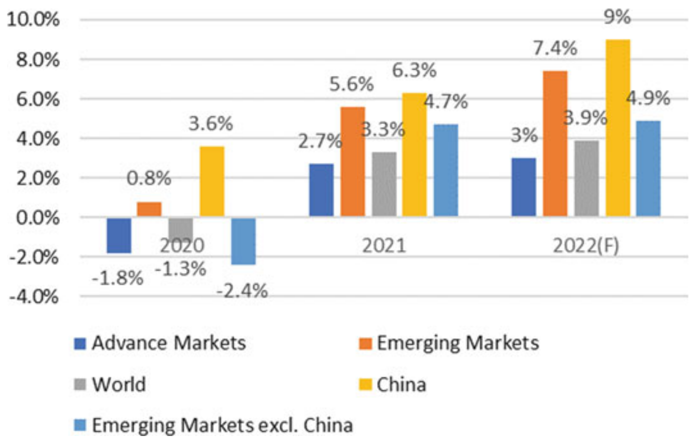


**Fig. 74.2** Global insurance marketplace position of premium growth

in 2022 and 2023 is expected because of supply chain challenges, labor shortages, and inflated energy prices [2]. Global life premiums are estimated to grow 2.8% from 2022 to 2023. Nonlife/General Insurance premiums are projected to grow 3.5% from 2022 to 2023, driven by rate hardening in commercial lines of business. Institute expects global insurance premiums to exceed $7 trillion by mid-2022 (Fig. 74.2).

As per the Deloitte report [12], the consolidated premiums for all lines rebounded by 3.3% for full year 2021 and likely to be 3.9% in 2022. China is founded to lead the way with 9% growth in 2022, followed by emerging market at 7.4%, while advance market are likely to see more moderate gains averaging 3%.

The industry will exhibit an unusual growth trajectory and profound financial performance in 2022. Yet the global survey from Big 4's indicates that there are multiple challenges cut across Finance, Talent, Technology, and Marketing as insurers continue to acclimate to the pandemic's aftershock and seek massive enterprise transformation to propel faster growth and safeguard their enterprising future.

## 74.2 Emerging Trends Reshaping the Insurance Industry

In the year 2022, insurers are evaluating, scaling, and refining the numerous digital adoptions they had implemented as need of the hour to meet the requirements during and after pandemic era supported by virtual workplace (equitable to hybrid work model) and redefining customer engagement journey to ensure mere difference before and after COVID generation [14]. Also, insurers are relentlessly revamping the process and ICT landscape with the help of emerging and disruptive technology strategies to achieve sustainable growth and fulfill the long-term vision. Though core system modernization remains the top priority for the insurer, integrating data

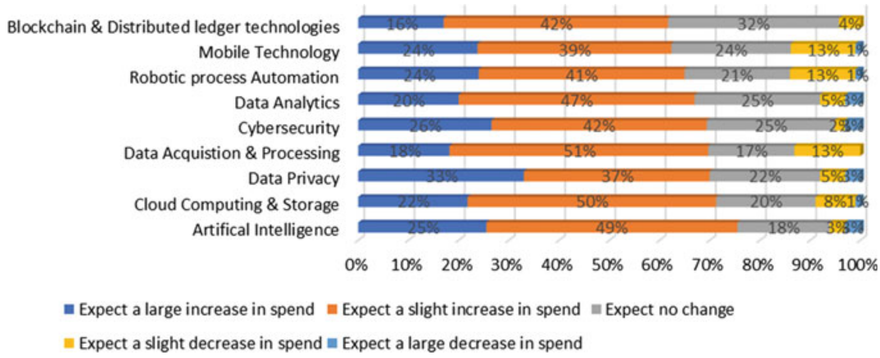


**Fig. 74.3** Emerging technologies where carrier expects to increase spending in 2022

analytics, rejuvenating business processes and models, creating personalized offerings, and automation solutions will be in center stage to increase efficiency and revenue—the majority of which will be deployed in the cloud platform. Post COVID, insurers have realized that accelerated technology adoption has become evident, the battle for talent resources is expected to be more ferocious in the year 2022. Deloitte's survey [12] recently expects technology budgets to rise by 13.7% in 2022 (Fig. 74.3).

From a technology point of view, the ever-increasing usage of Artificial Intelligence (AI), Big Data Analytics, and cloud adoption will revamp the technology/ICT landscape [14] of the insurance value chain. Insurers are increasingly investing in conventional AI or chatbots, Big data capabilities to communicate effectively among various stakeholders, improvise user experience, and reduce wait times [10]. Insurer data can generate analytics and insight to transform customer experience via personalized products as per customer needs, product bundling, and subscription models. For example, Mitsui Sumitomo Insurance has an AI-powered "agent support system" to accelerate the potential need identification of customers by analyzing internal and external data. AI is also helping to adopt new business models such as AI-driven Underwriting/Pricing, and insurers collaborate with online retailers to provide required insurance products and benefits in real-time while purchasing consumer goods.

Another emerging trend gaining sound traction among insurers is striving to build a digital-ready workplace (hybrid work model) encompassing onshore presence, remote working capabilities, and offshore presence, offering a digital working ecosystem systematically orchestrated by virtual collaboration using standard communication tools. This implies that the talent approach should be adopted in parallel. The insurer needs to examine their productivity, collaboration, and innovation by doing trial and error on different plans.

## 74.3 Discussion

With digital strategies being implemented across insurance companies (e.g., self-service portals, chatbots, core modernizations, etc.), face-to-face contact is problematic for potential customers (e.g., old age population in Japan) who still want to buy services that way. Hence carriers should start adapting and find other ways to integrate with legacy approaches to insurance operation, personalized product development, distribution, and marketing. Insurance companies should not neglect the human touch with the digitalization embedded in the insurance life cycle. The insurance carrier needs to consider which form of insurance interaction channel users will prefer, digital versus human intervention, to create a unique yet exciting experience for its customer community.

Insurers are moving toward a ready-made COTS product that requires little or no modification (product flexibility) to roll out their new and existing line of business. Selection of these COTS products is a challenging and cumbersome process, and hence the collaboration with Insurtech or IT service provider will play a huge role. Citing reference example, AXA AL is establishing a tripartite ecosystem with contractor customers, technology vendors, and innovation leaders to create an enterprising construction ecosystem using cameras and sensors to gather data to draw impactful insight, which would rejuvenate engagement experience with commercial customers.

Innovating and penetrating with new insurance products (for cyber risks, climate change, pandemics, and intangible assets) is also becoming a discussion point. Many insurers are yet to participate in the crypto insurance market, leaving relatively a broader market segment in the current time on how to underwrite with profitability and market such policies. Another one is cyber insurance which remains an unexploited opportunity with less than 1% direct written premiums. With remote working and increased digitalization, underwriting and pricing coverage are enormous challenges that insurers need to address. 60% of the organization are expected to invest in some form of cybersecurity [3] by 2022–23. Scaling usage-based insurance to multiple lines of business is another hot topic that will impact the market globally. It is widely used for auto businesses, and companies are getting a good return on their investment in this COVID era. In a nutshell, the insurer needs to make their products modular, reallocate capital between commercial and personal lines, and move speedily to establish strong market positions in the new risks [13].

Environmental, Social, and Governance (ESG) have become a top priority as the direct impacts of the COVID-19 pandemic have receded [16]. Until 2021, discussions around sustainability were largely theoretical. Still, in 2022, many insurers would be taking credible steps toward embracing hard metrics as they would be committed to addressing the full range of ESG issues and opportunities [16].

## 74.4 Conclusion

The COVID-19 pandemic has made significant changes in the insurance industry (General and Life Insurance) in terms of people, processes, and technology (know-how) and changed the perspective of the end customers. Insurance organizations are quickly integrating emerging technologies, focusing on the digital stack, committing to agile way, upskill or reskilling workforce, adapting innovative business models and products (such as usage-based insurance) to sustain in such turbulent times and maintain growth and profitability. Also, organizations across the globe are adopting new norms like making their employees work remotely from their homes, crafting a hybrid work model, adhering to safe distancing measures, and contactless transactions (especially by agents and brokers) to negate the effects of business disruption and meet customer expectations. Also, with COVID-19, the insurers respond to this situation depending on the demographic regions.

Above mentioned imperatives would enable carriers to answer the "how to play" question in 2022–23. Insurers must invest quickly and massively in high-volume activities with technology, digital skills, data and analytics capabilities, customer experience, and compliance competencies to keep pace in the changing environment. Several players have already adapted, and others will be changing and refocusing their footprint and business model—in effect, rebalancing their portfolio of activities and reviewing their capital allocation, mainly through M&A and asset disposals. Many insurers believe they will be able to recreate value creation by offloading existing legacy liabilities to owners better positioned to manage them and by changing their business model.

Insurance companies will be using transformation lever to sustain and prosper in the post COVID world. Though core value chain elements will remain in insurance, all critical business processes (from quote to policy issuance to claims) will be more streamlined, which will be enabled by digitalization, investment in technology, and automation with no code/low code. Another notable emphasis would be enhancing and personalizing customer engagement and experience with simplification of products portfolio, which can be customized according to individual needs. The insurer needs to focus on business strategies (peer-to-peer insurance), technologies (Telematics, IoT platforms, Drones, Blockchain, machine learning/deep learning), structural simplification, marketplaces, and enterprise agility to achieve full potential [9].

In any geography, the insurers that will quickly integrate technology, upskill the workforce, adopt innovative business models will taste success in such turbulent times. In a nutshell, insurers need to reinvent themselves to become future-ready. Enterprises need to prepare themselves, focusing on the "Trends and Trinity" optimization, "Trends" in terms of technology, regulations, business models, and "Trinity" or the three dimensions of speed, efficiency, and risk.

Insurance companies around the globe are standing at a crossroads wherein they need to assess their investment portfolio, experience a new hybrid work model, increase focus on technology spending and adoption, macro and micro hedge strategies to strengthen their capital and operational efficiency [7]. As Peter Drucker famously said that "Luck never built a business. Prosperity and growth come only to the business that systematically finds and exploits its potential." Therefore, insurance companies need to develop strategies based on a holistic understanding of current and future trends and reassess their product depth and breadth, geographic focus, technology capabilities, operating model, and core business process capabilities. The verdict is clear; a proper balance between disruptive innovation (embracing through disruptive technologies) and operational innovation (refining existing business processes across value chain keeping customer centricity at center stage) with novel business models will help the insurer disproportionally succeed and build sustainable and enterprising future.

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