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How technological trends transform the insurance industry

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Executive Summary

- Insurance companies are undergoing a digitalization process providing their users with chatbots, mobile applications, omnichannel claims capabilities, and AI-generated quotes. Speed, consumer convenience, and efficiency will also help to create unique product experiences.
- Environmental, social, and governance are few factors that are driving innovation and it is important for innovation to be happening in the insurance industry leading to company success. Key success drivers in the insurance industry are risk selection, risk management, risk acquisition, and investment operations.
- Five main challenges in the industry are digitizing small commercial, commoditization, improving quality of analytical data, using data to improve experiences, and cybersecurity.
- There are five trends that will change the insurance industry which are applied AI, distributed infrastructure, future connectivity, next-level process automation and virtualization, and trust architecture.

Industry Overview

According to experts, the insurance industry has stayed quiet during 2021, after many uncertainties regarding COVID-19. However, the insurance industry is expected to grow significantly over the next few years. Even if the pandemic is not completely over, insurance companies will make big investments in consumers and develop technologies in order to provide an efficient service to clients. By making those improvements, insurers must consider what customers they should address.

Direct customer

The modern insurance industry divides the direct consumers into three parts:

Life and health insurance segment: Life and health insurance segment is the most common in the insurance industry. It offers payment to reduce the risk of premature death or, in the case of annuities, offers a stream of income to offset the risk of living longer than expected. Usually, it also permits a tax-advantaged form of investment.

Property/casualty segment: This segment addresses individuals and businesses who suffer direct and indirect losses due to fire, or other forms of natural disaster. Nowadays, the average return on equity in the Property/Casualty (P&C) industry is 16.8%, which is a significant number in the insurance industry.

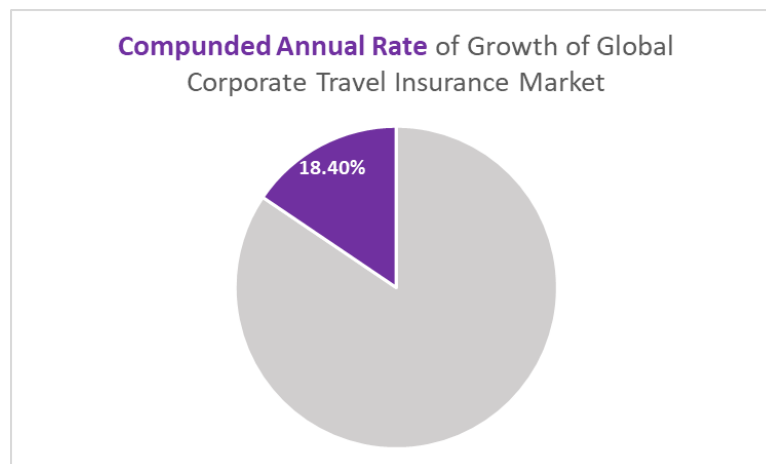
Financial management segment: This last segment involves reinsurance and various forms of excess insurance and works mainly with businesses and companies.

Indirect customer

Indirect customers in the insurance industry arise mainly because of the consequences of direct losses. This usually occurs due to natural disasters. For instance, if an earthquake happens, it can destroy the structure of a building where a store operates. The indirect consequences of the natural disaster are the sales and revenues lost until the damage gets fixed. It may also include the salaries of the workers of the store who will be the indirect customers.

After having analyzed the customer segments we have to take into consideration how digitalization plays a key role in the development of the insurance industry. Despite the uncertainty of the next few years, there are many positive steps that insurers can take to succeed in the uncertain future. Everybody talks about the importance of being consumer-centric but just a few know to implement this strategy. Insurers have focused on solving relevant emerging problems, especially the ones related to insuring consumers against life-changing circumstances. It is important to recognize these circumstances during the sales process and advise clients appropriately.

According to a market research study by Facts and Factors, the demand analysis of Global Corporate Travel Insurance Market size and share is expected to grow over USD 10,274.23 million by 2028, at a CAGR of approximately 18.40% between 2022 and 2028.



The key success drivers in the insurance industry are: risk selection, risk management, risk acquisition, and investment operations. It is key to identify what are the risks that the business is willing to take, in other words, being efficient at underwriting and pricing. Also, managing risk must be dominated as reinsuring unwanted risk and managing claims effectively. The next step is being able to subscribe to insurance, using sales channels, and connect with the clients. In order to continue to operate in the market, it is important to assure the business is earning good returns on the reserves. Five of the main challenges and constraints the insurance industry is facing are:

Digitizing small commercial: Small business insurance companies are dealing with outside pressure to modernize and get on board with emerging digital technologies. Larger insurers understand the importance of the small commercial and are making a push to move into this market and update it.

Commoditization: Commoditization is risky in the insurance industry. Treating consumers like they are mere commodities makes the business lose clients. Consumers want to feel valued and understood by the insurance businesses. This can be achieved by using artificial intelligence and automated processes to provide personalized services.

Improving the quality of analytical data: Even if data is constantly generated in the insurance industry, insurers must have a robust data management plan in order to work with a big quantity of data.

Using data to improve experiences: Furthermore, it is important to use data appropriately in order to improve experiences. Even if consumer centralization is key in the insurance company, it is one of the main challenges for insurers. Companies must leverage the digital insurance solutions at their disposal. Insurance businesses must provide clients with chatbots, mobile applications, omnichannel claims capabilities, and AI-generated quotes.

Cybersecurity: Nowadays, there is an ever-present concern about cybersecurity threats. This presents an opportunity for insurers since individuals and businesses seek out protection for their own data and privacy.

According to McKinsey & Company, the following are important trends that will transform the insurance market during the next few years: applied AI, distributed infrastructure, future connectivity, next-level process automation and virtualization, and trust architecture. Insurance companies must take these trends into account to potentially change their current products and services to adapt to a changing and digitizing world.

Technology Trends

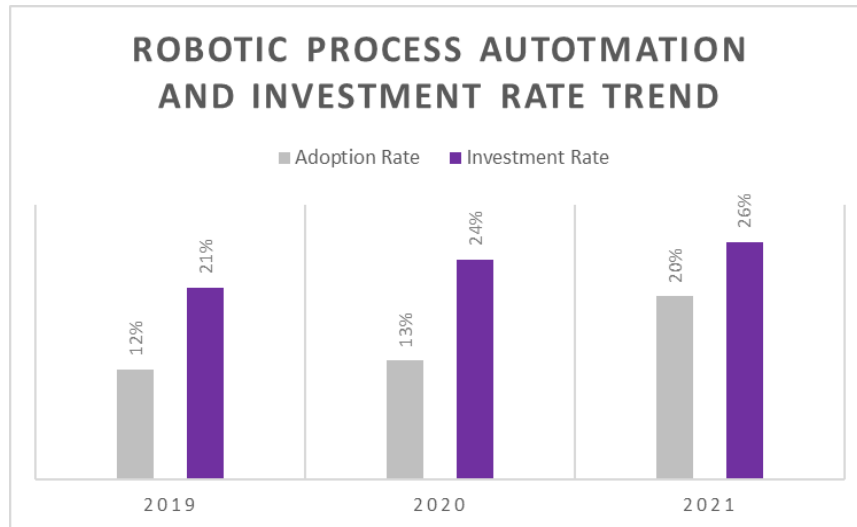
With rapid growth of technology, many industries are changing to better adapt to the growth. There have been many technology trends in the insurance industry that are predicted to change operations. As mentioned above, McKinsey & Company have predicted five main trends that will have an impact on the industry. The trends that are predicted are Applied AI, Distributed Infrastructure, Future of Connectivity, Next-Level automation, and Trust architecture.

In **Applied AI**, only few carriers are truly integrating applied AI in their operations and not many are fully able to do so as they are still experimenting. When AI becomes integrated in the insurance industry, it will have an impact in distribution, underwriting, claims, and service while improving efficiency in serving customers. For example, in warehouses, AI will remove the majority of the working human population which will change course in workers' compensation coverage affecting underwriting. Algorithm will slowly be commoditized which will help insurers to change their core process and will be a lot more predictable as services will be AI focused which will disrupt distribution, underwriting, claims, and services. Insurance companies are suggested to also use AI for creating new products and services with the help of their data.

As cloud technology has grown in the past, insurance companies will slowly shift to cloud for their main services and this is where **distributed infrastructure** comes into effect. Launching new products as well as better customer service will also be noticed as part of this transition.

For insurance more specifically relating to automobiles, insurance companies have started to monitor vehicles using GPS technology and on-board diagnostics (OBD) to track its movement and this process is also known as telematics and this is in the trend of **Future of Connectivity**. In the telematics process, data is being shared with the help of Internet of Things (IoT) and that will provide customers more sense of their needs as well as help insurers understand risk at the time of purchase and after. With 5G networks becoming more widely available, this helps the insurance industry to provide real-time services to their clients and improve data sharing in terms of speed. However, this itself is a big risk to companies as customers may not prefer their vehicle movement to be tracked. I believe if companies were to implement this, it will cause many lawsuits or consumers will lose their trust on their insurers. On the other hand, the tracking can also be beneficial to those consumers whose vehicles have been stolen as they can quickly track its location helping their customers save thousands of dollars. The tracker can also be difficult to deactivate by thieves as it will be implemented with new technology.

In the **Next-Level automation technology** trend, increasing investments have been made in robotic process automation to increase efficiency in back-office operations compared to previous years. One risk with this would be that since there are new technologies, insurance companies would have to periodically think about their products and services and would have to change their automation processes.



Source: Computer Economics, 2020

Last but not least, **Trust architecture**. As customers have to provide sensitive personal information to companies, newer technologies will have to be able to handle large sets of information and must limit risks regarding it such as information leaks. One recommended process for handling customer data in a safe way is to use blockchain as it becomes more adopted due to the growth of cryptocurrency. Many insurance companies are at a very early stage of adopting these trends and are at risk of being overtaken by competitors. It is highly recommended to executives in the insurance industry to hire consultants to examine and understand how these trends will affect their main products and services and provide recommendations which will be helpful in guiding the company in future years.

Once insurance companies adopt these trends, it will have an impact in many areas. Firstly, it will make insurance underwriting much easier as applied AI and next-level automation will allow us to underwrite a much broader range of risks allowing us to use accurate data from multiple sources. Another impact will be seen in labor-intensive industries as the type of risk can be changed from human injuries to robotic risks such as cyberthreat as more robots are being used and that will also bring change in coverage and underwriting provided by insurance companies. Another impact will be that insurance companies will be better able to provide customized pricing and cover individuals in creative ways. With technology, you will need to assess risk continually rather than once due to continuous innovations of products. This will lead to making products that will adjust premiums and benefits regularly.

With all these trends, insurers will need to review their products and services and ponder how they should change their actions. These trends mentioned above have the potential to reform the entire insurance industry by creating many opportunities and putting those companies at risk which do not adapt to these trends. With these changes, insurers will be primarily used for prevention rather than claims. Going forward, insurance companies will need to hire more tech talent and increase focus on technology needs.

Observations and Recommendations

Even if COVID-19 has hit the insurance industry as many others, it is expected to grow significantly during the next few years by making significant developments. Digitalization plays a key role in this development of the insurance industry since many consumers who are used to digitally enabled convenience with other products and services expects the same from their insurers. In addition, it is important for insurers to be consumer-centric and focus on solving relevant emerging problems, especially the ones related to insuring consumers against life-changing circumstances. There are five main challenges and constraints the insurance industry is facing are: digitizing small commercial, commoditization, improving the quality of analytical data, using data to improve experiences, and cybersecurity.

McKinsey & Company established five important trends that will transform the insurance market during the next few years: applied AI, distributed infrastructure, future connectivity, next-level process automation and virtualization, and trust architecture. Only few carriers are truly integrating applied AI in their operations and not many are fully able to do so as they are still experimenting. When AI becomes integrated in the insurance industry, it will have an impact in distribution, underwriting, claims, and service while improving efficiency in serving customers. Insurance companies are suggested to also use AI for creating new products and services with the help of their data. It is known that insurers around the world have significant technology debt with core processes by on-premise legacy technologies. While the cloud matures, many insurers will be nimble in launching new products and services by shifting many of the core processes to the cloud. Moreover, the wider adoption of IoT could usher in a similar reshaping of product life, health, property, and commercial lines. Increasing the frequency of IoT devices will help to understand risk consumer needs at the time of purchase. Industrial IoT allows real-time monitoring of equipment to provide predictive maintenance before claims happen, which will improve the efficiency of the insurance service.

Furthermore, it is known that insurers usually handle sensitive client information; however, the ongoing evolution of products and services requires the exchange of even greater information between insurers and customers. This step is crucial to allow insurers to use complex consumer data to develop a more active role in claim prevention.

In conclusion, once insurance companies adopt these trends, it will have an impact in many areas. It will make insurance underwriting much easier as applied AI and next-level automation will allow us to underwrite a much broader range of risks allowing us to use accurate data from multiple sources. In labor-intensive industries, the type of risk can be changed from human injuries to robotic risks such as cyberthreat as more robots are being used and that will also bring change in coverage and underwriting provided by insurance companies. By doing that, insurance companies will be better able to provide customized pricing and cover individuals in creative ways. Overall, these trends mentioned above have the potential to reform the entire insurance industry by creating many opportunities for future development and growth.