

# RESHAPING THE INSURANCE INDUSTRY

How Ping An transforms through technology?

## What is InsurTech?

The insurance industry is one of the most competitive and regulated industries, and financial technology (fintech) is ready to upset the market. Insurance has long been manpower-intensive, involving many inefficient procedures. There are so many gaps for fintech to fill that there is now insurance technology (InsurTech). Using AI, machine learning and information systems, InsurTech reinvents the insurance model by automating and digitalising its services, creating new products, business models, and capturing new markets. Aside from new players set up to disrupt the industry, incumbents are increasingly collaborating with tech companies to offer alternative products, creating both opportunities and threats to the insurance industry.

## A Company Like No Other - Ping An Insurance

An InsurTech company that stands out is Ping An Insurance (Group) Co. of China Ltd., a world leader in integrated financial services. Its units span across insurance, banking, healthcare and technology. Today, Ping An is China's biggest insurance provider with 90 million customers, US\$230 billion in market capitalisation and US\$175 billion in revenue in 2020<sup>1</sup>. Ping An solidified its position as an industry disruptor by heavily investing in and adopting technology in every part of its business. They have an R&D team and a technology development team of 110,000, including 3,000 scientists, and 4,625 technology patents in the first half of 2020 alone<sup>2</sup>. Spending 1% of its annual revenue on R&D, Ping An is at the forefront of adopting the latest technologies and having a first-mover strategy.



Source: The Economist<sup>2</sup>

## How Ping An employs InsurTech

InsurTech also plays a big role in improving the efficiency of Ping An. Data analytics is involved in many parts of the insurance business, including analysing potential customers, risk calculation and machine learning algorithm training for fraud detection and claims verification. Ping An has built a cloud-computing service for hosting its banking and insurance systems which became so successful that sales of this cloud service make up 4.5% of the group's net profits in the first nine months of 2020, rather than adding to cost.

The company employs AI in its agent recruitment process by scrutinising details such as voice, choice of words and gestures to pick out talents, saving Ping An 680,000 hours in 2019<sup>3</sup>. Meanwhile, its smart underwriting system has a 90.8% accuracy rate of risk identification, approved 96% of policies and reduced the underwriting process from 3.8 days to just 10 minutes<sup>3</sup>. Ping An's AI Smart Quick Claim system combines image-based loss assessment, optical character recognition, and facial recognition technologies, completed 96.4% of urban auto claim investigations within 5–10 minutes in 2018<sup>4</sup>.

Apart from technology, Ping An has a very vast ecosystem spreading across multiple industries, creating a large user base for cross-selling. It includes *Haofang*, a one-stop-shop for real estate activities and *HaoChe*, a car leasing business that holds 76% of China's online car sales market share<sup>5</sup>. Ping An's ecosystem engages customers with other business lines before cross-selling products. When customers purchase a home on *Haofang*, they will be introduced to Ping An's mortgage service and home insurance naturally. This ecosystem also provides an elaborate database to its advantage as it analyses data collected for its underwriting. Data from *HaoChe* such as servicing frequency and car conditions can be mined to train its underwriting machine, allowing Ping An to own its entire insurance value chain, a strategy not many insurers can employ and achieve efficiency gains.



Source: Ping An<sup>3</sup>

## How does the consumers benefit?

Ping An aims to be a one-stop financial service platform with an in-depth understanding of its customers through its proprietary big data and technology<sup>6</sup>. With the integration of technological advancements in its insurance service, Ping An's customers are able to enjoy greater benefits from its wide variety of products and services. Ping An's strong ecosystem connects functions across the company, working together in a conglomerate by incorporating 3 core technologies - AI, Cloud, and Blockchain. These technologies provide greater accessibility to customers as they can access a variety of product information easily on a single platform. Ping An Good Doctor, a mobile healthcare platform, allows better communication to customers by establishing itself as a key player in providing online medical services, hospital appointments, health management and consultation<sup>7</sup>. This enhances the convenience for the customers as they will not only be able to manage their health portfolio and appointments with ease, the registration and claiming process for their policies will be automated through the integration of its services.

As AI is an essential component of Ping An's technology, they will be able to deliver transparency and flexibility to customers when choosing a plan suitable for them. The AI technology enhances the decision-making process of the customers by providing targeted products that are suitable to their needs. Additionally, they will be able to generate better risk assessment and pricing and enhance claim adjustments etc<sup>8</sup>. The use of AI technology will aid in identifying trends and emerging risks from individuals to major corporations, which will provide greater analysis and developments on the product offerings. By using technology to pursue innovation, they can increase their efficiency, cut costs, improve customer's experience, and mitigate risks. Customers will be able to enjoy greater convenience and ease of purchase with digital automation on the platform.

## Advantages Ping An leverage on

### Strong ecosystem and network

Ping An is a well-established company that maintains a strong presence in the insurance and financial services sector in China. Given that it has a foothold in the world's fastest-growing economy - China, Ping An is able to gain traction and expand its provision into various markets and services. As mentioned previously, Ping An has a solid ecosystem it has developed over the years. The five ecosystems work together in harmony with the incorporation of its 3 core technologies. By having a "technology-enabled ecosystem", Ping An manages to seamlessly connect its technology and distribution network with the vast services it provides. In addition, they are able to make use of their existing customer base to entice them to newer innovations they have come up with.

### Growth in the InsurTech industry

InsurTech plays a huge role in the transformation of the insurance ecosystem by creating new value innovation in the digital world. Even though the industry is a novelty on its own, it has become a growing force around the world as investment funding have increased over the past few years<sup>21</sup>. Many venture capitalists have been investing in growing InsurTech providers and incumbents are also trying to acquire and support companies that create these technologies. According to Fintech News Singapore, Asia is a rising InsurTech hub as it is one of the largest underdeveloped insurance markets with a growing demand forecast<sup>20</sup>.

### Leveraging on existing technology

By creating a network that seamlessly connects throughout, Ping An has incorporated Blockchain technology into their commercial network. Their Blockchain throughput manages up to 50,000 transactions per second and they are one of the largest commercial blockchain platforms with over 40,000 nodes in 200 banks, 200,000 corporates and 500 other entities<sup>9</sup>. Additionally, this technology has been applied in multiple platforms such as the HK eTradeConnect and OneConnect's China supply chain by recruiting a group of technology, finance, and IT professionals<sup>9</sup>.

In addition, Ping An has a strong cloud infrastructure with over 400 cloud patent applications and a core development team. They also use various applications such as Ping An's OneConnect for their financial services ecosystem, Ping An Good Doctor in the healthcare ecosystem, Autohome for their auto services ecosystem, and Ping An Smart City for their smart city ecosystem.

"Ping An creates a closed-loop for customer attraction, migration and retention, facilitating cross-sales and up-sales of its financial products," Iris Tan, a senior equity analyst from Morningstar wrote on how Ping An provides a closed network within itself<sup>6</sup>. Ping An is able to leverage its available resources, technology and expertise to create new products to stay competitive in the industry.

### Potential for growth

#### Product innovation through R&D

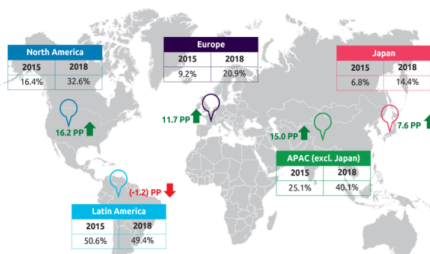
Ping An has a strong research team in various areas such as AI, blockchain, healthcare, finance as mentioned. Hence, they can leverage existing expertise to develop better and more targeted products for the customers. By creating newer technologies in-house, they are able to gain a competitive advantage in the industry that is exclusive to the company and its customers.

#### Growing market size and customer's perception

Over the last decade, the market has grown tremendously. The influx of new customers has led to a change in consumer's preferences and willingness to purchase. In the APAC region, there is a growing prominence of InsurTech in the emerging markets despite the dominance of the U.S. and Europe in the industry<sup>2</sup>.

According to a study by NUS, the growth of InsurTech can be attributed to increased adoption of new technologies, greater investments in digital transformation, expansion of domestic enterprises, extensive development of the infrastructure, and the rapid growth of GDP in these regions<sup>21</sup>. With a better economy, customers will be more willing to purchase insurance from technology firms as shown in the figure below. Given that Ping An targets the APAC region, specifically China, they are able to ride on the growth of this industry as customers are more receptive to newer technologies, given the benefits it brings to them.

Customer Willingness to Purchase Insurance from BigTech Firms (%), 2015, 2018



Source: Fintech News Singapore<sup>20</sup>

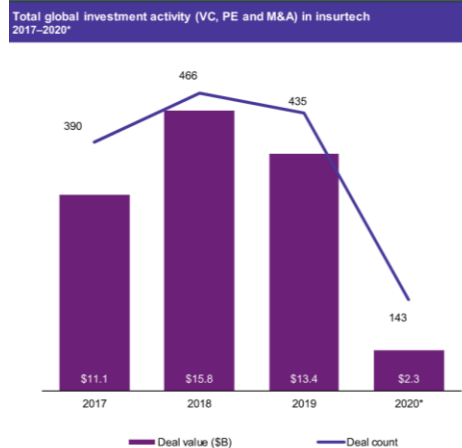
### Challenges Ping An faces

#### Environmental considerations

As customers are becoming more environmentally conscious, it has become a growing concern for Ping An as they have a track record of environmental issues in the past<sup>10</sup>. This can escalate to consumer backlash as many customers are now considering environmental protection as a key component of doing business. As such, Ping An has taken efforts in investing in green infrastructure by reducing carbon emissions and creating greener buildings to leave a smaller carbon footprint<sup>11</sup>.

#### Volatile economic environmental situations

Erratic patterns in the economy have caused Ping An and the industry to be exposed to further volatility. For example, as COVID-19 impacted many businesses around the world, InsurTech was not excluded as research found that investors have pulled back in 2020 due to the pandemic. Studies conducted by KPMG showed that venture capital (VC) investments in InsurTech dropped significantly in 2020 due to frothy valuations and lack of significant exits outside of larger acquisitions<sup>13</sup>. The InsurTech market is volatile to economic changes and if a major event impacts the economy in the future, the market will most likely be significantly affected again as well. With lesser funding, it may be harder for InsurTech providers like Ping An to advance their technologies.



Source: KPMG<sup>13</sup>

#### Rising intense competition

Given the stable profitability of the industry, it has led to an increase in the number of players over the past few years. This has created a downwards pressure on Ping An as more competitors are entering the market<sup>12</sup>. Even though Ping An holds most of the market share in the InsurTech industry, many players have been progressing over the years. Some of Ping An's biggest competitors are global companies such as Prudential and AIA. According to Comparably, Ping An ranks first in its pricing, customer Net Promoter Score (NPS) and customer service. However, they fall short on the other categories such as product quality, CEO rank and diversity rank. Hence, it is recommended that Ping An improve their customer's satisfaction by creating more targeted products for its customers.

### Obstacles of the industry

#### Cybersecurity and data protection

Keeping consumers safe and secure is a concern for the industry. Financial institutions have been the prime target for cybercriminals. The data such firms store contain confidential information such as bank account numbers, addresses and personal information that are extremely sensitive and valuable. Experian predicted that it is only a matter of time before a top cloud service provider is subject to a major cyber-attack and data breach<sup>14</sup>. Ping An implements the highest standards of information security by continuously adjusting existing information security management based on market regulatory changes and technology updates.

#### Frauds

Insurance fraud is still rampant today and addressing such risks is vital for InsurTech firms like Ping An who seek to increase their consumer base. With technology advancing rapidly, it may reduce the occurrence of fraudulent claims by having greater data availability, as AI and improved data analytics augment the capability of insurers to detect and intervene to prevent frauds from occurring. Ultimately, technology is seen as a double-edged sword and despite advances in cybersecurity, fraudsters inevitably find ways to deceive the system<sup>16</sup>.

#### Regulatory Changes

Presently, insurance companies in China are subjected to regulatory supervision by the China Banking and Insurance Regulatory Commission (CBIRC). In 2020, CBIRC revised its "Rules on Internet Insurance Business" to address issues in the marketplace amid a surge in companies seeking to join the online insurance sector. This new framework includes clear policies and rules for the internet insurance business, licensed operation, and the integration of insurance with new technologies including big data and blockchain<sup>18</sup>. With the increasing frequency of regulatory changes, InsurTech players must react and adapt swiftly to the new normal.

#### Looking forward to InsurTech

We are only witnessing the start of this industry's transformation. Regulators around the world are moving to lower barriers for InsurTech to boost confidence for companies and investors alike. As InsurTech grows, we will see further gains and better-integrated services for both consumers and insurance companies alike.

The rapidly expanding middle class and heavily underinsured China and Southeast Asia also equates to wealth accumulation and appetite for big-ticket items, leading to greater demand for other insurance protection on top of health and life. Companies with multiple business lines like Ping An stand in an advantageous position, due to both its broad ecosystem and first-mover advantage in InsurTech. It is inspiring to observe the true disruption and transformation of the insurance industry.

Contact: Leonard Tan, Research Director  
leonard.tan.2020@business.smu.edu.sg

Sources:

- <sup>1</sup> Nikkei Asia. (2021, July 16). *Ping An Insurance (Group) Co. of China Ltd.* Retrieved from <https://asia.nikkei.com/Companies/Ping-An-Insurance-Group-Co.-of-China-Ltd>
- <sup>2</sup> Kambayashi, S. (2020, December 3). *How Ping An, an insurer, became a fintech super-app.* The Economist. Retrieved from <https://www.economist.com/finance-and-economics/2020/12/03/how-ping-an-an-insurer-became-a-fintech-super-app>
- <sup>3</sup> Ping An. (2020, February). *2019 Annual Results.* Retrieved from <https://group.pingan.com/resource/pingan/IR-Docs/2019/pingan-ar19-presentation.pdf>
- <sup>4</sup> Prakash, A. (2020, May 4). *The Ping An Ecosystem— how an insurance company reached the Forbes top 10 ranking.* Medium. Retrieved from [https://medium.com/@arun\\_prakash/the-ping-an-ecosystem-how-an-insurance-company-reached-the-forbes-top-10-ranking-df3136ff41c](https://medium.com/@arun_prakash/the-ping-an-ecosystem-how-an-insurance-company-reached-the-forbes-top-10-ranking-df3136ff41c)
- <sup>5</sup> Taylor, S. (2020, October 9). *Bonus Food: Ping-An, the tech giant masquerading as a finance company.* Fintech Brain Food. Retrieved from <https://syttaylor.substack.com/p/bonus-food-ping-an-the-tech-giant>
- <sup>6</sup> Ho, J. (2017, December 28). *Company in focus: China's Ping An puts the 'tech' in fintech.* Nikkei Asia. Retrieved from <https://asia.nikkei.com/Business/Company-in-focus-China-s-Ping-An-puts-the-tech-in-fintech>
- <sup>7</sup> PAGD. (n.d.). *Company Overview - Ping An Good Doctor.* Retrieved from [http://www.pagd.net/allPage/aboutUs/47?lang=EN\\_US](http://www.pagd.net/allPage/aboutUs/47?lang=EN_US)
- <sup>8</sup> PwC. (2016, June). *Opportunities await: How InsurTech is reshaping insurance. PwC Fintech insurance report.* Retrieved from <https://www.pwc.com/qx/en/financial-services/assets/fintech-insurance-report.pdf>
- <sup>9</sup> Ping An Group. (2018, November 7). *Ping An Powering Ahead with World-leading Fintech and Healthtech.* PingAn. Retrieved from <https://group.pingan.com/media/news/News-2018/Ping-An-Powering-Ahead-with-World-leading-Fintech-and-Healthtech.html>
- <sup>10</sup> EMBA Pro. (2019, March 4). *MBA SWOT: Ping An's Overseas Expansion: Financial Uncertainties and Risk Management SWOT Analysis & Matrix - strengths, weaknesses, opportunities & threats.* EMBA Pro for Executive MBA Professionals. Retrieved from <https://embapro.com/frontpage/swotcase/2125-ping-an-s>
- <sup>11</sup> Ping An Group. (n.d.). *Community & Environment.* PingAn. Retrieved from [https://group.pingan.com/ESG/community\\_environment.html](https://group.pingan.com/ESG/community_environment.html)
- <sup>12</sup> Department, S. M. (n.d.). *Ping An SWOT Analysis Matrix (Strengths, Weakness, Opportunities, Threats).* Fern Fort University. Retrieved from <http://fernfortuniversity.com/term-papers/swot/1433/1079-ping-an.php>
- <sup>13</sup> KPMG. (2020, September 1). *Pulse of Fintech H1'20 – Insurtech.* Retrieved from <https://home.kpmg/xx/en/home/insights/2020/09/pulse-of-fintech-h1-20-insurtech.html>
- <sup>14</sup> Experian Data Breach Resolution. (2019). *Data Breach Industry Forecast 2019.* Experian. Retrieved from <https://www.experian.com/assets/data-breach/white-papers/2019-experian-data-breach-industry-forecast.pdf>.
- <sup>15</sup> Ping An. (n.d.). *Ping An Group Information Security Policy.* Retrieved from [http://pingan.com/app\\_upload/file/official/sustainability/InformationSecurity.pdf](http://pingan.com/app_upload/file/official/sustainability/InformationSecurity.pdf)
- <sup>16</sup> GRF CPAs & Advisors. (n.d.). *Which Industries are Hardest Hit by Fraud?* Retrieved from <https://www.grfcpa.com/resource/which-industries-are-hardest-hit-by-fraud/>.
- <sup>17</sup> Staff, R. (2013, October 14). *Ping An's securities unit fined by China regulators.* Reuters. Retrieved from <https://www.reuters.com/article/pingan-fine-idUSL3N01426X20131014>.
- <sup>18</sup> Wuestner, C. (2021, March 25). *China issues online insurance regulation amid boom in internet platforms.* Lockton. Retrieved from <https://global.lockton.com/gb/en/news-insights/china-issues-online-insurance-regulation-amid-boom-in-internet-platforms>.
- <sup>19</sup> Chanjaroen, C., & Zhang, D. (2021, March 1). *China Fintech Curbs That Hit Ant Were No Surprise: Ping An.* Bloomberg.com. Retrieved from <https://www.bloomberg.com/news/articles/2021-02-28/china-fintech-curbs-that-hit-ant-were-no-surprise-ping-an-says>.
- <sup>20</sup> Fintech News Singapore. (2018, August 29). *Asia: 100 Insurtech Companies and Counting.* Fintech Singapore. <https://fintechnews.sg/23449/insurtech/asia-100-insurtech-companies/>
- <sup>21</sup> Lin, L. & Chen, C. C. H. (2020). The promises and perils of InsurTech. *Singapore Journal of Legal Studies*, 2020, 115-142.