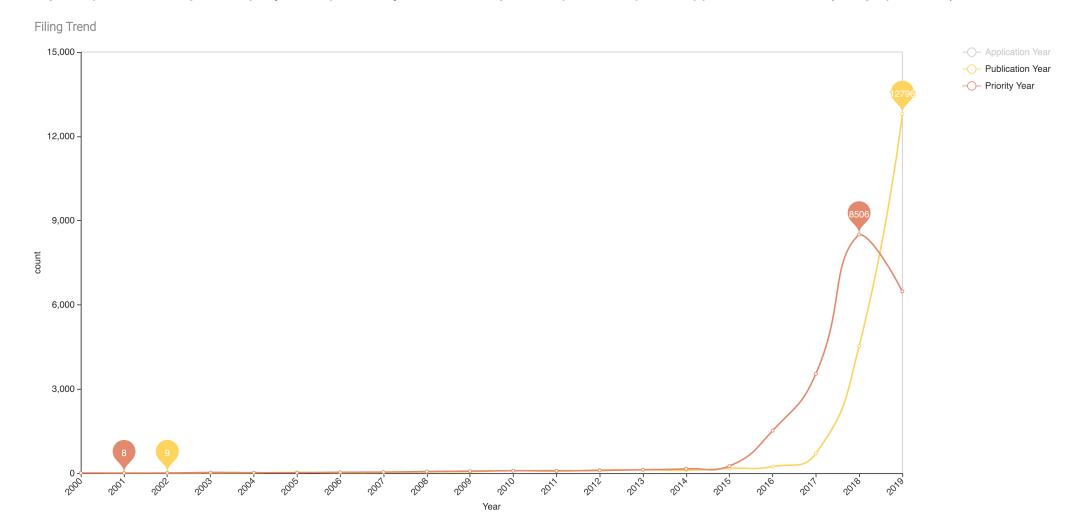




Ping An's embrace of patents still leaves it trailing the big boys

Ping An Technology, the core technology arm of insurance, banking, and financial services conglomerate Ping An Group, made a remarkable debut in WIPO's 2019 top PCT filer list with 1,691 patent applications pushed through the international route – five times more than in 2018. The Chinese heavyweight has clear ambitions of becoming a "technology-plus-finance" company within the next decade, as outlined by the firm's co-CEO Jessica Tan in an interview with *Bloomberg*. To realise this goal Ping An has significantly ramped up its filing activity, focusing on three key technology areas: artificial intelligence, blockchain and cloud computing.

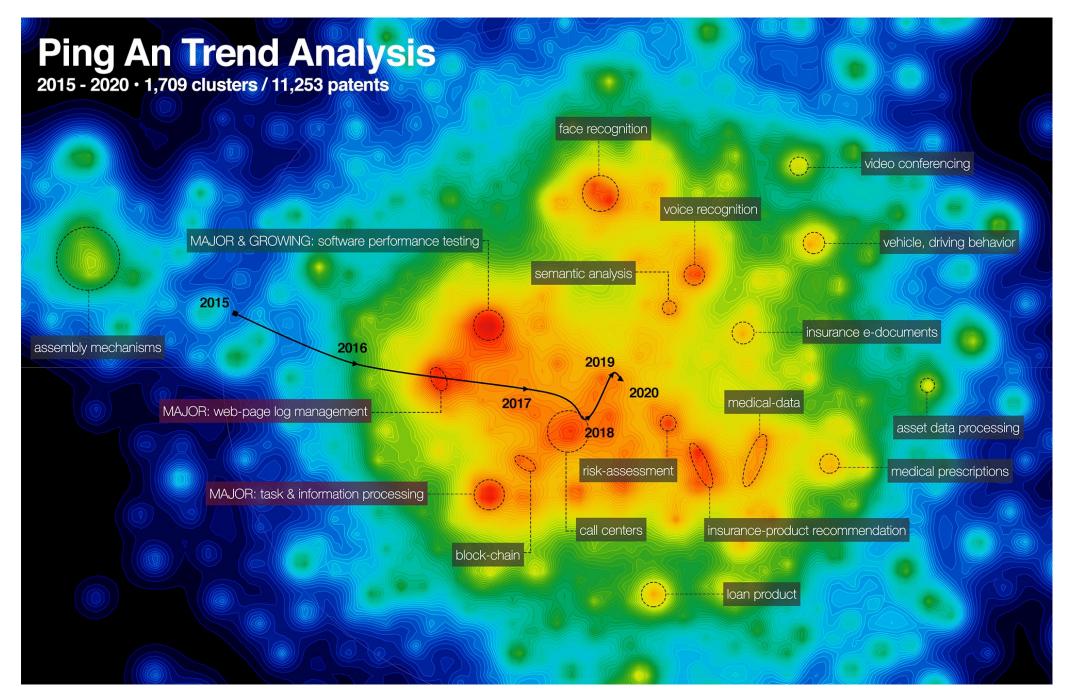
Ping An's portfolio has grown rapidly in the past five years, recording 21,470 published patent applications to date (see graph below).



Source: Dolcera PCS, see full size image here

In the earliest days of technology development Ping An, particularly Ping An Technologies, focused on data logging and monitoring of web-pages, analysts from <u>Valuenex</u> observe (see image below). These areas are still a core part of R&D, but data management and processing, including risk assessment and recommendation, are recent areas of focus. Further, data acquisition technologies, such as face and voice recognition, video conferencing and driver-behaviour are emerging as peripheral technologies.

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Source: VALUENEX, see full size image here

Senior analyst and analyst at Dolcera, S Rajan Kumar and Subhanesh Perinbaraj, isolated the high-quality assets (those patents with a ranking of three and over) within Ping An's portfolio to gain a better understanding of the company's strengths. The most valuable assets are related to Al/machine learning, information extraction and fraud monitoring (see graph below).

Publication Year Vs Dolcera T	ags		0	31
Training, Validation, And Test Sets			31	27
Artificial Neural Network			25	25
Fraud			13	8
Insurance Fraud			12	6
Computer Vision				6
Fraud Deterrence	1		5	3
Feature Extraction			25	22
Feature (Machine Learning)			15	25
Part Of Speech			12	21
Information Extraction			13	16
Question Answering				6
Sentence Extraction				5
7	Solo	2027	%°,6	10 ¹ 0

Source: Dolcera PCS, see full size image here

In her *Bloomberg* interview, Tan argued that the company's cutting-edge technologies were rarely seen, or even impossible to find, among other financial institutions. Former co-CEO, Lee Yuan Siong, further stated that they had utilised technology to empower their business far earlier than others within the industry.

According to analysis conducted by Kumar and Perinbaraj, this is true - at least at a local level. Of its regional competitors, only China Life Insurance Group and China Pacific Group have even begun to do patent ground work. The former owns 37 published patents and the latter 20. Even then, their focus is more on technologies relating to data processing. Only Zhong An, a fintech start-up, is close to being on the same playing field to Ping An. Its portfolio consists of 340 patents, with a focus on data/image identification and data processing, machine learning, and blockchain technologies.

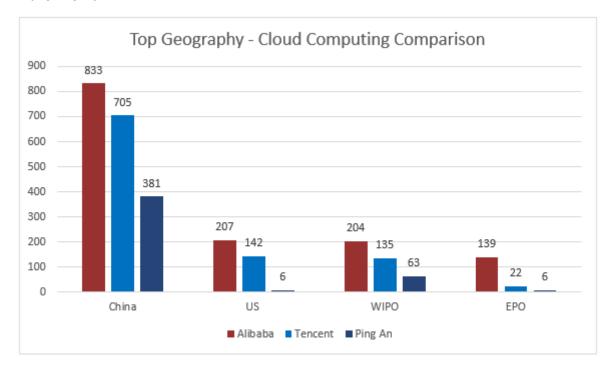
A better comparison to understand the development of Ping An's portfolio is to look at internet giants Tencent and Alibaba, which have interests in the same key technology areas.

Blockchain

An analysis of blockchain technologies (restricted to financial applications), shows that these three Chinese firms all innovate within smart contracts, blockchain and cryptokeys. Alibaba is leagues ahead of the rest when it comes to patent volume, with 1,208 applications. It is followed by Ping An, (239) and Tencent (108). Drilling down into high-quality assets puts Ping An and Alibaba on a more equal footing: the former owns 31 such patents and the latter 39.

Cloud computing

Tencent and Alibaba have a head start when it comes to cloud computing, with filing activity ramping up in 2011 and 2014 respectively. Not surprisingly, then, the internet giants have much larger portfolios than Ping An, as seen in a comparison of the three portfolios divided into their top geographies.



Source: Dolcera PCS

IAM says:

There is one key caveat to this week's data – the vast majority of Ping An's patent applications have yet to be granted.

But what the data does tells us is that the company is investing heavily in its patent portfolio with a clear focus on cutting-edge technologies. The fact its PCT filings surged last year indicates that it believes these assets are very important to its future. Something else to bear in mind is that in her Bloomberg interview Tan mentioned that Ping An has started licensing its technology to local and international businesses.

Nevertheless, the true strength of Ping An's portfolio will not be understood for another year or two. Only then will we be able to see if the company's filing levels are sustainable and whether it is truly producing a faster flowing stream of patentable inventions.