



Underwriting in China – A Digital Transformation

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The Life insurance market in China has grown tremendously with premiums increasing nearly three-fold from RMB1.06 trillion in 2010 to RMB2.96 trillion in 2019. With a population now close to 1.4 billion, the insurance penetration – which has grown to 4.6% – is still far from that of developed countries. Together this represents a business development opportunity because we expect the trend of growth in the insurance market to continue.

In anticipation, insurers in China began to move their underwriting from a paper process to an online one approximately three years ago. Today the bulk of transactions are paperless, except for a small volume of bank channel applications. However, given the huge daily volume of new business insurers still have an urgent need to improve their processes further. While we are not suggesting a major overhaul of underwriting is needed, there is room to incorporate innovative ideas that address various pain points, provide a smoother customer experience while still balancing risk management needs.

In just two decades, China moved from an entirely cash-based economy to one dominated by mobile-payments and this has helped boost sales of insurance products online. The rise of online insurance has proved a catalyst for automation. Now technologies mean underwriting can be completed in less time thanks to much reduced manual interference.

Hurdles and Milestones in Online Processing

The Gen Re team in China embarked on its digital underwriting journey some time ago, and ever since has worked closely with our clients to implement digital solutions that further the evolution of underwriting in China – and beyond.

Digital solutions are addressing an array of issues. Today underwriters in China face demands for extremely fast turnaround times while dealing with an exponential growth in new business volume, so automating the selection process as much as possible helps to alleviate the pressure on them.

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About This Newsletter

Risk Insights is a technical publication produced by Gen Re for life and health insurance executives worldwide. Articles focus on actuarial, underwriting, claims, medical and risk management issues. Products receiving emphasis include life, health, disability income, long term care and critical illness insurance.

With the gradual reduction in the sales of savings products and a higher proportion of protection-oriented product sales the underwriting process is becoming increasingly important to insurers and reinsurers in China. Furthermore, the design of underwriting questions and how they flow, and the application of behavioural economics principles can encourage clearer and fuller disclosure, which in turn improves risk selection.

The introduction of online tailor-made underwriting rules for each specific product has created a seamless underwriting experience for customers, reduced manual work for underwriters, and enhanced consistency in underwriting decisions.

Last but not least, moving the risk selection process online helps insurers and reinsurers to collect underwriting data in a more structured manner. Insights gained from analyzing this data allows companies to further improve their process and to take on certain risks that might not have been possible previously.

First Generation (1.0) – Introduction of Smart Questionnaire

Several years back Gen Re supported the launch of the very successful online, mid-end medical product – commonly known as “Million-Dollar Medical”. In the first phase, when the smart underwriting questionnaire was developed, a smooth underwriting process was considered key to the success of this new product on a relatively new channel.

With affordable premiums and a rapid application process – a simple answer of “no” to having any of seven specified medical conditions – the product proved popular. Due to the product having a high deductible feature, this simplified approach was acceptable, and the claims experience in line with expectation.

The obvious drawback of this simplified approach is that when an applicant discloses that they have one of the stated medical conditions they are declined cover regardless of the severity of that condition, when they would be offered terms using a more conventional underwriting approach. Over time the product features have been made richer with medical questions asked individually in a multi-layered reflexive style that helps collect more precise information on certain medical conditions. These changes have made it possible to offer this product to many more customers.

Interim Development (2.0) – Broadening Use Cases

For the second phase of development, we explored how to extend the modification of the underwriting process to other products. In addition to designing dynamic questions for short-term medical products, we helped insurance companies to automate their underwriting process also including questions required for mortality products.

Unlike for short-term products, underwriters assessing long-term mortality products require more information to properly evaluate risk. This includes information on an applicant’s health, medical history, family history, smoking, income, occupation, education, just to name a few. The list of medical questions for long-term mortality products is also different. During this phase the wording of questions was modified so as to be more easily understood and layers of reflexive health questions were added to suit the product allowing underwriting decisions to be given to customers.

This approach works perfectly for policies with sums assured within non-medical limits that can be issued without automatic medical evidence. With extensive use of reflexive questions, manual follow-up on health questions with a “yes” answer has been greatly reduced, while valuable risk data can be collected that immediately enables companies to better predict the mortality risk profile of the applicants.

Forging Ahead (3.0) – Data Exploration

For the next phase of development, we explored how to further improve the current process by capturing and analyzing underwriting data. This led to the systematic inclusion of standard codes to capture all the medical conditions discovered during the underwriting process. Until now it has proved difficult to analyse the data collected during underwriting due to missing information or poor record formatting. The codes mean we can track the progression of certain conditions throughout a policy lifetime and so derive more precise pricing from the data collected. We are also now better informed on areas that created underwriting friction and can therefore think of solutions to further facilitate straight-through processing to keep reducing the proportion of applications that need human intervention.

One significant finding from our analysis is that the take-up of rated policies is at par with those accepted on standard premium terms. This runs somewhat contrary to the popular belief among intermediaries that their customers are less willing to accept rated terms therefore driving down closing ratios. Instead it seems the online platform encourages medical disclosure and an acceptance of any increased premiums that may result.

Underwriting 4.0

With the learnings from the smart underwriting solutions we helped our clients to develop, we ventured into pursuing a more comprehensive approach to online underwriting. One of the new ideas incorporated into this phase was product recommendations. In China, hypertension, diabetes and thyroid nodules have such high prevalence that they are common disclosures made by potential insurance customers. Insurance companies have therefore tailor-made products for individuals with high risk factors for these conditions, or an existing diagnosis of well-controlled disease. Naturally, the “standard” rates of premium applied to these products are different from generic products that target healthy lives.

When a higher risk customer applies, the underwriting rules steer them automatically towards a product which caters specifically to their medical condition using a tailored standard rate of premium. This approach has improved the outcome for customers who would previously have been offered modified acceptance terms and perhaps felt this disadvantaged them.

What's Next?

Our experience of moving the underwriting process online has given us many new insights. Even in analyzing the time taken by customers at each step of the process provided valuable feedback on customer behaviour. It's clear that technology is helping the industry to handle large volumes of applications quickly and with less human intervention, creating a better customer experience and improving closing ratio of new applications. Improving speed and efficiency will continue to be a key focus. We are also working on refining risk management through data mining and analysis of the underwriting data. The possibilities for the next era of underwriting are certainly exciting, let's embrace the change and work together to bring smarter insurance solutions to all.

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