

HARNESSING TECHNOLOGY TO NARROW THE INSURANCE PROTECTION GAP



The global insurance protection gap is one of the most pressing issues facing our society. It leads to a severe lack of societal resilience in many developing and emerging countries, where insurance today hardly plays any role when it comes to mitigating the impacts of natural disasters or pandemics, to name just two of the major societal risks. More often than not, all economic losses remain basically uninsured. This situation, however, is not limited to emerging markets. A recent example is the devastating earthquake that hit central Italy on 24 August 2016 where about 90% of total losses were uninsured.

With this in mind, The Geneva Association has analysed the potential contribution of digital and mobile technologies to narrowing protection gaps in both mature and developing markets, by enhancing the awareness, affordability and appeal of insurance products and solutions. Our most recent research report offers an in-depth review of relevant key concepts of insurance economics, practitioner approaches and specific case studies. The findings were complemented and validated through 23 executive and expert interviews.

Kai-Uwe Schanz, Senior Advisor

Fabian Sommerrock, Deputy Secretary General and Head of Insight

REAL-WORLD SUCCESS STORIES

Rapid advances in connectivity, mobility, cloud computing, 'big data' analytics and social networking offer a tremendous potential to narrow insurance protection gaps. There are various success stories which support this claim. Think of breakthroughs in microinsurance enabled by mobile technology which benefit customers through a dramatic reduction in transaction costs across the entire value chain, from marketing to claims settlement. A well-known provider of such solutions is BIMA, which provides mobile-delivered insurance and health services in emerging markets. Another area where technology has proven effective in addressing protection gaps is behavioural insurance, as pioneered, for example, by Discovery, a South-African life & health insurer and its trailblazing use of tracking and monitoring devices. This innovative form of insurance has helped address long-standing obstacles to efficient markets such as moral hazard and adverse selection. Peer-to-peer insurance, as offered, for example, by Friendsurance, goes in a similar direction by mitigating moral hazard and insurance fraud. And, last but not least, parametric insurance, leveraging mobile and meteorological technology, can enable breakthroughs in agricultural insurance. An example is the Kilimo Salama (Acre) scheme in Eastern Africa.

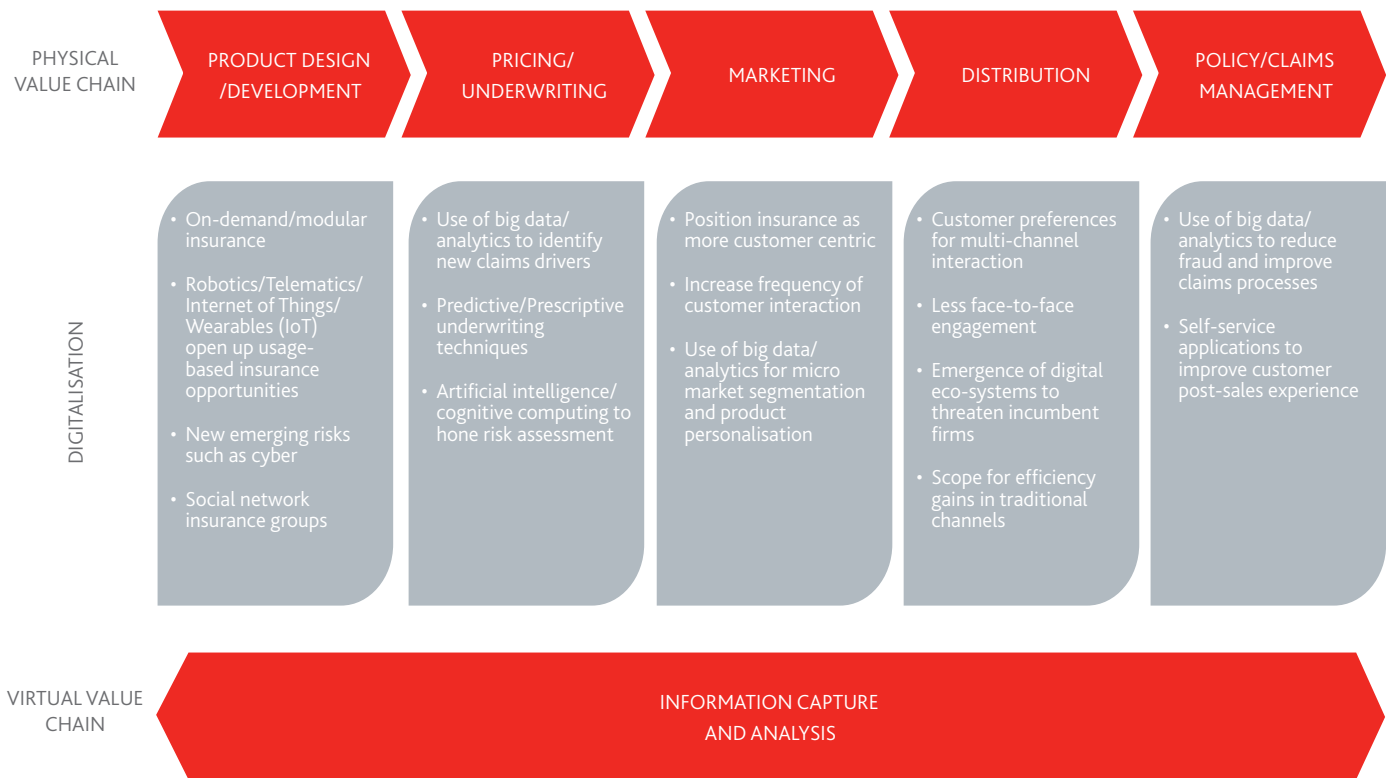
"I see four main areas where technology has already contributed to narrowing protection gaps: firstly, in climate insurance based on parametric covers, secondly through mobile distribution of microinsurance, thirdly through enabling points of sales such as retail networks and, fourthly, through Internet-driven product design and sales in more mature markets."

Rolf Hüppi, Founder, Chairman & CEO, ParaLife

TOWARDS THE VIRTUAL VALUE CHAIN

Reaping these benefits on behalf of their customers requires insurers to digitise their existing value chains (see Figure 1). The impact of digitisation across the value chain is pervasive, permeating the areas of pre-purchase, sales and operations. Firstly, it reshapes the way customers discover and perceive insurance propositions pre-purchase. Secondly, sales are enhanced by dropping costs as a result of disintermediation, and increased conversion of leads on the back of tailored solutions and 'digitally enhanced' physical distribution channels. Thirdly, the adoption of straight-through-processing can lead to a massive reduction in back-office costs. Coupled with Big data and predictive analytics, it can also translate into significant improvements of the claims ratio.

Figure 1: The virtualisation of the insurance value chain



Source: Swiss Re.

ADDRESSING MORAL HAZARD

As many case studies demonstrate, digitisation makes it less likely that an insured will be more careless, behaving against the interest of other insureds, simply because they are protected. Big data-enabled pricing based on risk sends a strong signal to the insured about their riskiness which is likely to encourage behavioural changes. Currently, most insurers still use traditional actuarial methods and proxies for risk that rely on generalisations, for example, premiums that depend on age and gender. Modern technology, however, enables insurers to gauge individual, behavioural and real-time risk much more accurately, not only through monitoring devices but also through social media. As such, big data can mitigate moral hazard for those risks that can be controlled by the policyholder and, hence, make insurance markets operate more efficiently. However, differential pricing in insurance markets can raise fundamental concerns about solidarity in society when major risk factors are outside an individual customer’s control. Life and health insurance are obvious examples.

Another intriguing notion is that big data might even be harnessed to expand the limits of insurability. It can kick-start new types of insurance that are currently not feasible due to informational constraints and moral hazard. Think of sophisticated index-based products, for example, where individual behaviour and the uncertainties surrounding it are no longer a road block.

REMOVING INFORMATION ASYMMETRIES

In the digital age, traditional information asymmetries in insurance are bound to disappear, with both insurers and policyholders benefiting from much improved information and data sources at much lower cost. Against this backdrop, big data enables quantum leaps in risk classification and makes insurance more attractive to ‘good’ risks whose loss probability directly translates into more favourable individual pricing. Those risks no longer have to pay a premium which reflects the loss probability of the entire population – which may previously have prompted them not to purchase insurance altogether.

“By using behavioural indicators as a more meaningful way of assessing riskiness, insurers could safely and responsibly extend coverage to significantly more people, without assuming disproportionate risk, and narrow the insurance protection gap.”

David Shrier, Managing Director, MIT Connection Science

CUTTING TRANSACTION COSTS

By lowering first and foremost the cost of information gathering and processing, digitisation enables insurers to administer, underwrite and price risk as well as settle claims more accurately and efficiently. In competitive markets, insurers will have to pass their cost savings on to policyholders in the form of lower insurance premiums. Overall, digitisation will, therefore, boost the efficiency of insurance markets and benefit consumers by

lowering transaction and information costs. As insurance becomes more affordable, the digital revolution is set to allow for more insurance to be purchased. It will change the economics of self-retention by reducing incentives to carry risks on individual, household or corporate balance sheets.

As shown above, this is particularly relevant for low-income markets, where technology such as a robust mobile payment infrastructure can significantly facilitate the provision of many types of insurance by dramatically lowering transaction costs.

"From a developing country and mass market point of view, excessive product complexity and a lack of flexibility in terms of payment channels are among the fundamental reasons for under-insurance and the still limited relevance of insurance. Mobile and digital technology can and will address both issues."

Gustaf Agartson, CEO, BIMA

Overall, modern technologies are expected to boost insurance demand via all three major levers, i.e. affordability, awareness and appeal as illustrated by Figure 2.

BOOSTING THE AFFORDABILITY, AWARENESS AND APPEAL OF INSURANCE

Affordability improves as the 'production cost' of insurance decreases significantly. As shown before, digitisation enables major savings in all key cost areas: claims and claims settlement, acquisition and administration. As a result, individuals and households but also corporations will revisit their approach to self-retention and are likely to transfer more risk to professional carriers. Of course, the digitisation of existing value chains requires massive investments over

a multi-year period. Therefore, it will take time before cost savings and improvements in affordability materialise.

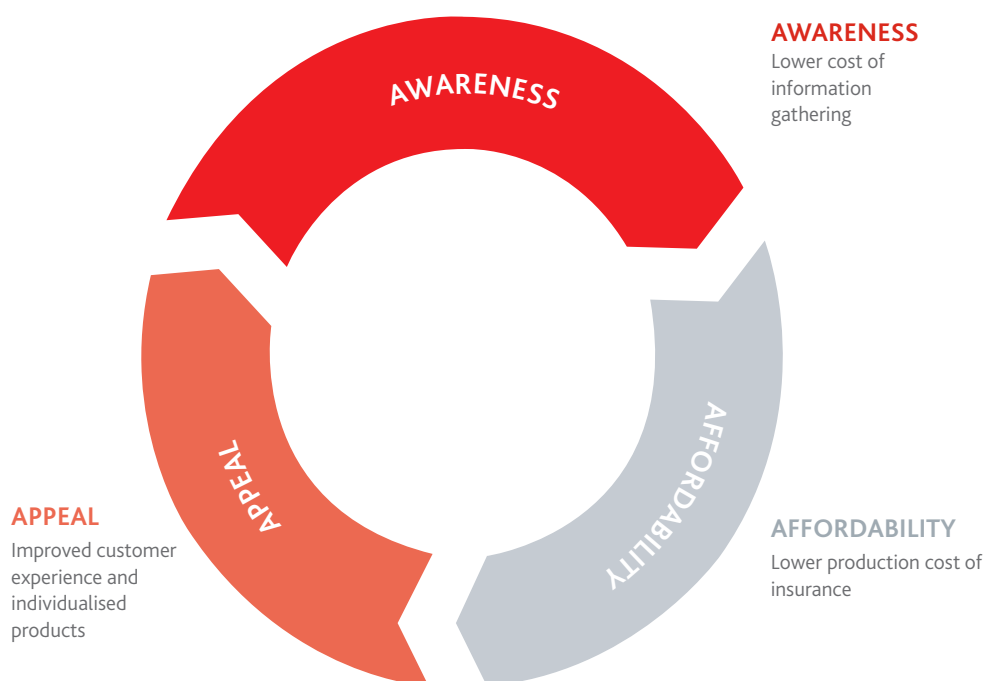
Social media and mobile tools of communication enable massive improvements in public awareness of insurance and its cost and benefit characteristics as well as main product configurations. In combination with better affordability increased levels of awareness are expected to be a powerful catalyst for higher insurance penetration, in emerging and developing markets in particular.

Finally, digitisation comes with enormous strides in customer experience. Hassle-free and more regular communication, combined with a more favourably perceived cost-benefit ratio of more tailored and individualised insurance products can significantly enhance the appeal of insurance which, in mature markets also, should help address the protection gap. Figure 3 points to the scope for such improvements based on the perceived mismatch between policyholder expectations and insurers' offerings.

"The shortcomings of the traditional insurance business model are largely self-made. Insurers generally fail to understand their customers. The same is true of their approach to explaining their products and collecting and using underwriting data."

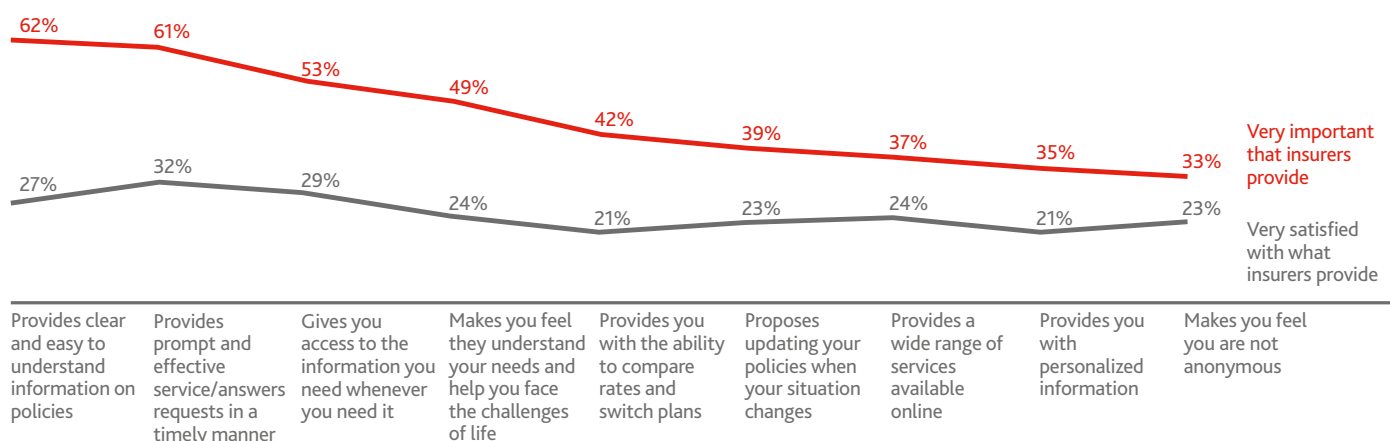
Dennis Just, Group CEO & Enforcer, Knip AG

Figure 2: The 'Triple A of insurance demand' in the digital world



Source: The Geneva Association.

Figure 3: The mismatch between what insurance customers want and what they get



Source: Accenture (2011).

THE ALL-IMPORTANT REGULATORY RESPONSE

Regulators, largely inexperienced in the digital space, are faced with a daunting challenge: how can one promote the development of financial technology, enhance traditional as well as facilitate new business models in the sector without conjuring up the prospect of failures and a loss of public confidence? How can a balance be struck between innovation and safety? More specifically, regulators need to reconcile data protection and usage; they must define insurers' scope for price differentiation in the age of big data and decide on the treatment of non-insurers engaging in insurance sales. The establishment of 'regulatory sandboxes' can go a long way for both regulators and regulated entities in building experience in this uncharted territory.

CONCLUSION AND RECOMMENDATIONS

Digitisation is a unique lever for insurers to develop more affordable, efficient and customer-centric products and solutions, thereby enhancing the societal value of insurance. However, in order to achieve this—and preempt potentially disruptive new competitors—insurers need to step out of their comfort zone. The imperative of digitising the value chain is bound to present major challenges and even tribulations to incumbents, from managing channel conflicts to implementing headcount reductions in administrative functions.

Insurers who make a virtue out of the necessity to change will not only safeguard their current role in mature and developing economies. As we have shown, they also stand a much better chance

of narrowing long-time protection gaps in a wide spectrum of areas, ranging from natural disasters to health care. Ultimately, modern technology, coming with an enhanced value proposition and improved customer experience, has the potential to completely reshape the perceived role and benefits of insurance in a way which could make the improved concept of risk transfer and management more relevant than ever before.

It is not only insurers but also the regulators who face the challenge of keeping up with the pace of technological change. They need to invest heavily in digital expertise in order to understand new insurance business models. Generally speaking, regulators face a delicate balancing act in particular: on the one hand, their mission is to ensure that policyholders are properly protected in the world of digital insurance, too. By clamping down on security deficits, unfair competition and fraudulent behaviour, for example, regulators play a vital role in building and fostering customer trust in digital forms of producing and selling insurance cover. On the other hand, precipitous and interventionist regulatory measures risk stifling innovation in insurance, jeopardising the many benefits from technology.

Even though the insurance industry's digital (r)evolution has just begun, technology has already contributed to narrowing protection gaps. Examples, as presented in the case studies of this report, include climate insurance based on parametric covers, mobile distribution of microinsurance and web-based product design and sales in more mature markets.

The report is available at: <https://bit.ly/GATechGapReport>

