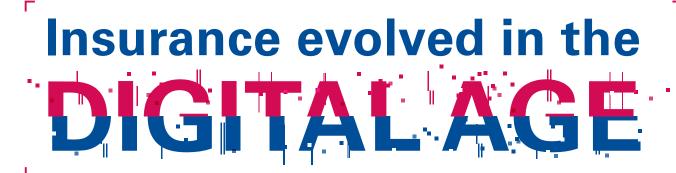


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Technology is disrupting many businesses across the globe and the insurance industry has not remained untouched. In fact, the insurance industry is faced with even greater challenges as they not only have to worry about how technology is affecting their operations, but also that of the clients they are insuring.

Influencing behaviour – The Internet of Things and the strategic leveraging of technology

Insurance companies that are actively leveraging technology as a strategic enabler, are moving away from the traditional insurance product design and risk-based approach to a more individual customer centric approach.

Discovery is a good example of this. By exploiting the opportunities technology continues to provide, they have dramatically penetrated the medical insurance, life insurance as well as short-term insurance market. Much like the successful FNB and OUTsurance, their success lies in their ability to leverage technology to influence behaviour. These organisations are all part of the Rand Merchant Empire that were led by a trio of pioneers namely Paul Harris, GT Ferreira and Laurie Dippenaar. These organisations all share the same strategic thinking when it comes to business. They are of the opinion that "opportunities lie in using technology in creating different business models"

For them, it is not about using technology to support the business but to use technology to exploit market opportunities. One only has to look at successful innovations such as Discovery's vitality programme and FNB's Ebucks rewards programme to understand the benefits of influencing behaviour.

Discovery's medical aid and life insurance actively encourages healthy living to reduce the need for medical calls and claims. In addition, their rewards are targeting the younger more healthy part of the population to ensure an equal distribution of age categories where other medical aids are struggling to retain and attract younger members. Discovery Insure also tracks driver behaviour to encourage its clients to behave and drive responsibly through cash back rewards.

These innovations are made possible by wearable activity trackers and other inexpensive monitoring devices that monitor health, driving habits and geo locations on an individual level to gather personal data over time. These devices are collectively referred to as the Internet of Things (IoT). The data is analysed to create generic profiles and to understand the levers that need to be pulled to influence client-behaviour to fit the needs of the business. The key is to create a mutual beneficial relationship that is, or appear, as a "win-win" situation.

With the available personal data and profiles, insurance organisations are now, more than ever, able to tailor insurance products to the individual's personal risk profile and needs. But it shouldn't stop there. One of the keys to sustainable success lies not only in understanding your clients' risk profile, but influencing your clients' behaviour positively (using a carrot and not a stick) to suit your needs. You want to entice them to live and do business the way you want them to and make decisions that will be to your benefit; whether this is enticing consumers to live healthier to reduce loss of life risk or to influence bad driving habits to decrease the risk of vehicle accidents.

The Internet and Television Association (NCTA) estimates 28,4 billion IoT devices have been deployed in the market as at 2017. This is expected to increase exponentially to 50,1 billion by 2020. People and businesses are becoming more interconnected than ever and with the emergence of smart facilities and homes, insurance companies might be able to plug into and monitor premises and common occupant habits. This could even include the monitoring of communities as infrastructure is rolled out to create an even more complete risk profile. Technology is making it possible to digitally record, analyse and influence people's behaviour which drive the risks underpinning any insurance business model.

Emerging Technology Disruption

In addition to understanding the IoT and how technology can be utilised to influence behaviour and reduce risk, insurance companies should always be on the lookout for new disruptive technologies in almost every market. They face losing market share to competitors if these disruptions are not pre-empted and responded to. Some of the more recent and high-impact disruptions include self-driving cars, peer-to-peer insurance and robotics. With the world becoming more and more interconnected, it is becoming easier for customers to perform price comparisons and switch to other insurance companies. Additionally, the completely digital self-help insurance company might not be far off with the

emergence of robotics, distributed ledger and big data technologies.

Tesla has been selling insurance included in its vehicles' final price as they reckon the "Autopilot" technology utilised by these cars make them much safer and less prone to accidents. They are not wrong as, in the US, the National Highway Traffic Administration found that crash rates for Tesla vehicles have reduced by as much as 40 percent since the introduction of "Autopilot". Tesla is starting to put pressure on insurance companies to reduce premiums for their cars. A report, issued by KPMG in 2015, also suggests that the auto insurance market will shrink by 40 percent by 2040. How will traditional insurance companies respond to this emerging technology and exploit the opportunities it brings?

New technology and cyber risk

Unfortunately, new technology also introduces new risks. Cybercrime is at an all-time high and insurance organisations make perfect targets as they move more toward digital channels and the collection of personal data for big data analytics. This provides cyber criminals with plentiful attack vectors and attractive targets for corporate espionage and other cyber related attacks such as Ransomware. Back in the 1980s and 1990s, hacking was more of a hobby and was seldom disruptive or harmful. Many organisations were also not as connected and confidential data was less prevalent. However, hacking can now be considered organised crime as cyber criminals have significant resources at their disposal and may probe and plan for more than a year before striking. The impact of a successful attack can range anything from a short disruption in service to a loss of customer personal data and the organisation's reputation. As recent as May 2017, many of the world's computers were held for ransom by a Ransomware iteration called WannaCry2.0 which exploits a Microsoft operating system vulnerability. Microsoft released a critical update for all its operating systems as early as March 2017 providing the world with almost two months to prepare for such

an attack. However, the Ransomware ran rampant for many weeks and the affected organisations' only hope to recover its ransomed computer and server data was to pay the ransom or recover from backups. This indicates that many organisations are still struggling with their proactive response to monitoring threats and implementing measures to protect and react to cyber related incidents.

It is also true that with every risk comes opportunity. Many insurance companies in the US, and around the globe, have started offering cyber insurance products which insures against cyber related incidents such as Ransomware. This affords organisations with the opportunity to off-set the costs between maintaining a robust cyber programme and transferring some of the risk to their insurance providers.

Get ready to face the storm

It is imperative for insurance companies to continuously re-invent themselves in the digital age and should consider the following:

- New digital sales and communication channels should be implemented
- Big data should be embraced and analysed
- Behaviours should be influenced to increase revenues and process efficiencies through positive reinforcement
- Emerging technology should be monitored and opportunities exploited
- Cyber risk should be appropriately mitigated and opportunities exploited

The insurance industry faces an interesting future and should look to embrace technology as a strategic imperative and exploit the opportunities it presents or risk losing significant market share and ultimately relevance in the market.