White Paper

Global Futures & Foresight

Life and Health insurance in the world we inhabit

The shape of things now

A number of important yet well documented drivers are shaping the future life and health insurance environment. Whilst piecemeal change always sufficed up until now; it is widely accepted that insurance remains one of the last industries to confront, and undergo, significant change.

There are a multitude of potential futures for Life and Health insurers in an increasingly volatile world. The rapid and unprecedented pace of change will drive out old business models and allow new ones to flourish. But what are the drivers and trends shaping and forming the industry and which opportunities should be pursued? There will be winners and losers as with all change but what should Life executives focus on to make their judgements. Keylane worked with the renowned Global Futures and Foresight organisation and commissioned it to research the broad cultural and technological developments that will create this new world. David Smith, CEO of Global Futures and Foresight worked in cooperation with Keylane to produce this illuminating study highlighting the drivers and trends, the opportunities and the risks of this rapidly evolving world.

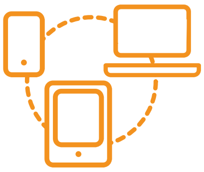
Regulatory burdens have long protected the industry from external competition and even extensive start-up intrusion, and although these boundaries remain reasonably robust, the danger does not lie in the emergence of like-for-like competitors but rather the emergence of different ways of servicing shifting consumer needs and expectations. This lag in experiencing disruption both deepens the potential severity of it when it comes, but also affords the industry time to learn from those that have gone before it and prepare for change from a proactive, as opposed to reactive, perspective.

Ageing is becoming an issue throughout the world and coincides with the rise of emerging economies. As a result, Asia's over 65s are the largest and fastest growing market in the world and by 2042 there will be more over-65s in Asia than the populations of the Eurozone and North America combined[i]. These increasingly urban first-time consumers are all entering a digital-first world, and these developments will reverberate around the world once the momentum is large enough. By 2027, there could be 150 billion networked measuring sensors operating, some twenty times more than the forecast global population[ii]. There can be little doubt that abundant data will help define tomorrow's winners from tomorrow's losers.

There is also a growing appreciation that such data will enable insurers to not just do things differently, but do different things. How insurers go about this will be central to issues of trust – an issue that becomes a key differentiator in an era of shifting regulatory requirements and governments looking to recalibrate their responsibilities in the face of strained public finances. These facets lead the World Economic Forum to '…project that consumer industries will change more in the next 10 years than in the last 40, and at an ever-accelerating pace of transformation[iii].'

Although many insurers remain unaware of the fact, KPMG estimates that almost half of all insurers business models have already been disrupted, or are in the process of being so[iv]. This makes identifying which trends are fundamental to change, and what to do about them, critical to the future of Life and Health insurance.

Strategic aspects of change



The Quantified Customer

As of 2016, an approximate 4,800 devices were connected to the network per minute[v]. In 2025, the figure is forecast to increase to 152,000 a minute .Whilst many will be involved in machine to machine communication, a significant portion will be used as wearables. Indeed, wearable products that relate to health are forecast to comprise a $233 billion market as soon as 2020[vi]. The increase in uptake of smart wearables is only one part of the 'quantified customer,' however. Not only will actual data volumes increase markedly with the advent of 5G, but so too will the quality as data is processed in near real-time, at the edge of networks. This could change not just how we do things, but what we do. IT strategies, consumer behaviour and the architecture within which to operate would all shift, some in unpredictable ways. 64 percent of CEOs believe management of data will be a differentiating factor in the future[vii]; with Microsoft, for example, currently integrating data from three of its sources -LinkedIn, Office 365 and Bing – to formulate new consumer facing propositions and services.

Indeed, it has been remarked that '…the Quantified Self movement is at the vanguard of something new and interesting that could herald a whole new era of the way we interact with…just about any major consumer brand[viii].' For example, 54 percent of consumers like the idea of linking their wearables to a pharmacy if it enables personal health and wellness advice[ix],. New consumer segments are likely to emerge as a result; smart solution provider Neos, for example, monitors pipes, doors, smoke alarms and windows 24/7 and provides video links for customers to follow. Neos then responds to any issues in real-time by sending the appropriate professional to deal with it[x]. Although drawing parts of both the traditional home security model and the P&C insurance model, what is emerging is likely to form its own distinct market whilst disrupting the two from which it emerged. Something similar could be provided for our health and wellness in a real-time basis. Haven Life, a direct-to-consumer life insurer in the U.S., has already started tapping into streams of quantified-self data sources such as prescription history and motor vehicle records. Haven can therefore issue policies '…without asking customers to undergo unpleasant, lengthy, and costly (for the carrier) medical tests[xi],' whilst the D2C model reportedly eliminates distribution expenses of more than 100 percent of the first year's premium. Such moves may be especially important for life insurers since they have experienced an 80 percent drop off rate from application to approval in the U.S, amongst Millenials, in part because people just don't want to do all the paperwork necessary[xii].

Another driver of the IoT is likely to lie in the evolution of what objects are able to transmit; smart tattoos could fully replace health and fitness wearables in the future[xiii] as technology becomes more ambient. Such technologies could measure internal bodily processes better than 'external' technology, whilst Kernel[xiv] style brain implants could even allow the creation of brand new mental health and wellness metrics.

> "THE QUANTIFIED SELF COULD HERALD A WHOLE NEW ERA OF THE WAY WE INTERACT WITH JUST ABOUT ANY MAJOR CONSUMER BRAND"

It has been said that when it comes to risk, there is little difference between digital assets and bodily fluids in that data trails can be as good an indicator of health or longevity potential as in-depth physiological profiles. The emergence of the quantified customer will blur the difference between the two further, yet offer an infinitely richer picture of real-time consumer health indicators by including contextual and situal information. Harvard Business Review correctly notes that '…the next generation of smart assistants and connected devices will learn from user habits and pick up on behavioural and environmental patterns in order to make these experiences more predictive[xv].' This changing nature of engagement fundamentally shifts the product and services insurers are able to offer. Buy+, a Chinese virtual reality shopping experience backed by Alibaba, engaged over 8 million users within a week of launching[xvi], allowing a degree of personalisation and further enhancing commerce's entertainment proposition.

The changing nature of engagement changes the product, and since the IoT provides an expansion of quantifiable parts, we will have ever more data at which to shape price points. Of equal import is that there are more points at which we can engage consumers, especially with forthcoming micro-GPS that can better contextualised data to within mere feet of our position, and the ambient passivity with which we will 'interact,' with technology. Emerging data sources and personalisation will ultimately spawn new industries and enable insurers to add value in entirely new ways[xvii]. Aviva, for example, has an internal app that connects employees to a single digital insight page on a given customer, including data gleaned from live social media feeds and curated calls[xviii].

Implications

- A mass of new data on wellness is imminent and could ultimately shape the direction of health and wellness, perhaps towards preventative healthcare.
- This will lead to a shift of services and capabilities that we might want to consume.
- Dynamic risk profiling and premiums could be seen as beneficial by customers if the process drives down costs.
- There will be a place in the insurance ecosystem for consolidators given the huge increases in data.
- Health and life will be worth more when we can measure more things.
- How can we add value to our customers?
- How can we improve their lives?
- At which points is it appropriate to attempt to engage with customers?

Data Access

By 2020, data scientists estimate that for every human on Earth there'll be 1.7 MB of data being produced every second[xix]. On a meta-level, this means expanding from 1 zettabyte in 2016 to 500 within the next three years. What to do about data in terms of volume, handling, authenticity and beyond, is central to future prospects.

Data access, ownership and how it is used will be a key future factor. At some point in the future, data could become a source of income; indeed '…by 2027 a significant proportion of personal income is likely to be derived from the data people generate[xx].' The World Economic Forum has even proposed the concept of a data bank account. A person's data, it suggested, should '…reside in an account where it would be controlled, managed, exchanged and accounted for[xxi].' About 66 percent of consumers view their personal information as valuable, and 65 percent are willing to share it with companies in exchange for some form of value[xxii]. This clearly undermines a key tenet of many current data models – its free availability.

"WHAT DATA WE HOLD AND HOW WE USE IT WILL BE THE LIFE AND DEATH OF OUR COMPANIES: THIS DATA COULD PROVE POISONOUS"

Consumer oriented control of data exchange is likely to proliferate. The Metadistretti e-monitor, for example, transmits collected ECG data '…via smartphone to medical professionals and other caregivers. The patients see all their own data and control how much data goes to whom, using a browser and an app. They can set up networks of health care providers, of family and friends, or of fellow users and patients, and send each different information[xxiii].'

However, a far bigger source of disruption lies in the legal underpinnings of current models. 84 percent of people aren't comfortable with smartphone and tablet apps using their personal data[xxiv]. This consumer issue will become a legislative one sooner or later. The current model of data use often lacks explicit consumer consent, is far from legally fool-proof (has no equivalent of the 'key facts,' featured in financial service products) and is open to huge disruption when, not if, it is challenged in court. When accepting terms on an app, no one reads the terms and this creates an unspoken legal risk that could upend all data reliant businesses unless proactively dealt with. What data we hold and how we use it will be the life and death of our companies; this data could prove poisonous if misselling or similar can be proven using situal and contextual data. The risk of retroactive judgement for misusing data, whether reputational or legally, allied to sheer data volume will likely create a need for regulated third party data aggregation, dissemination and marketplace formation.

Organisations will need to provide value, in some form, to consumers for the use of their data. Future iterations are likely to evolve beyond current examples such as Vitality. New data services are likely to emerge that could use 'micropayments' to compensate consumers and other data sources to ensure data veracity and availability. How insurers access data, use it and in what form they provide value-in-kind for its access could change their business model profoundly. Once such an issue hits the courts, it's a zero-sum game as there is no competitive advantage from complying with legislation. Being ahead of such legislation, however, could prove beneficial in terms of demonstrating to consumers that you're ahead of the game and proactively addressing their issues.

Doing so may require greater soft skills- such as collaboration, than many currently possess. Third parties are likely to appear in the data space, since 5G, the IoT and imminent legal issues will strain the capabilities of even the most willing company to clean and collect huge volumes of future data. Trusted third parties may need to exist that can mediate access, dictate how long companies can hold it for, and permissively decide whether or not it can be used in personalised or anonymised ways.

Implications

- 'Trust may soon be a commodity that consumers not only want from the brands with which they interact, but demand to know about other people….in this new world, our "trust score" will be the only metric that people need in order to make decisions on how to do business, and with whom[xxv].'
- In the next four or five years, our knowledge surrounding personal wellness will double, easily. It must flow permissively. How our data is used, who knows where am I and so on is key.
- Customers, first and foremost, want problems solved – something that may go beyond an app and individual silos. Real-time, multidirectional data will deliver situal information, requiring new data strategies.
- Are we willing to disadvantage ourselves (in the short term) to benefit our customers? Doing something for customers advantage rather than the companies', builds trust.
- Are we prepared to cannibalise our own base?
- Is our data strategy future-proof?
- In what ways could we provide value-in-lieu?

"TRUST MAY SOON BE A COMMODITY THAT CONSUMERS NOT ONLY WANT FROM THE BRANDS WITH WHICH THEY INTERACT, BUT DEMAND"

Lifestyle and Health

That we are living longer is not new, nor is the rate of increase of potential longevity. By 2029 medical technology is forecast to add an additional year, every year, to life expectancy[xxvi]. Longer lives do not necessarily equate with healthier lives however. By 2030, obesity rates may reach 47 percent in US and 35 percent in England[xxvii]. Indeed, the wider grouping of non-communicable disease could cost $47 trillion by 2030[xxviii]; a figure far in excess of even the larger estimates given for the 2008 financial crisis. Studies have shown that for those who spend excessive time in sedentary positions, there is an association with a 112 percent increase in the risk of diabetes, a 147 percent increase in cardiovascular events and a 49 percent increase in death due to any cause[xxix]. More than 20 million people in the UK are physically inactive, according to a report by the British Heart Foundation[xxx]. The effects and unintended consequences of such diseases are myriad; one of the more interesting is that medical tourism is forecast to account for 1 In 8 international trips by 2025[xxxi], creating a whole new parallel health and wellness economy.

It is increasingly possible, however, to counteract sedentary lifestyles and their resultant impacts at earlier ages. Turning away from compensation and towards mitigation of risk could enable greater customer engagement for life and health insurers through more transactions. New York City based app, SketchFactor alerts users in real time, on specific dangers on a given street and potentially unsafe neighborhoods[xxxii]. With ambient data, health and wellness become real-time constructs and ones that insurers are already basing propositions around. Some 45 percent of care given in Dutch hospitals could be better done at home[xxxiii] McKinsey cites one unnamed Dutch insurer as already pioneering new activities in this area, having partnered with a leading tech company to develop a platform for the remote monitoring of chronically ill patients and help encourage healthier lifestyle choices[xxxiv]. The use of technology, and in some cases combining with neuroscience, could also help provide better outcomes for consumers. Again in the Netherlands, doctors helped enable quicker recovery from hip surgery by using nudge behaviour. By batching hip replacements, doctors discovered a quicker than average healing rate since an element of competition was implicitly introduced amongst patients wishing to get better.

Consumers would appear ready for such new approaches; 97 percent of people indicate that they would be willing to share personal health data if it would enhance their care[xxxv]. Consumer brands able to engage on a number of different levels are likely to form intermediaries. 73 percent of millennials, for example, would be more excited by a financial services offering from PayPal, Square or even Apple, Google, and Amazon than from their traditional provider[xxxvi]. Trust is essential for insurers, and building it through intervening appropriately in consumers' lives is plausible. Are we as consumers more likely to trust company a) spending one percent on life and health advice on how to live a healthier life, or company b) spending ten percent on such advice? Investing in the customer experience rather than on back office maintenance could ultimately help improve the bottom line in the medium to long term.

"TURNING AWAY FROM COMPENSATION AND TOWARDS MITIGATION OF RISK COULD ENABLE GREATER CUSTOMER ENGAGEMENT FOR LIFE AND HEALTH INSURERS"

A longer life, lived in better health, will shift a range of underlying assumptions from personal, societal and business point of views. Indeed, the minute we believe we will live to an older age, our expectations and attitudes regarding children, partnerships, health, insurance and careers will change. How we acquire things changes fundamentally and could engender a gap lifestyle (like a gap year but longer) that ends the notion of monolithic stages of life. Some insurers are already placing themselves well to account for this change. Swiss Life's Nordic partner Danica Pension, for example, has been working with ethnographers and anthropologists to gain insights into how life events impact its consumers' behaviour relating to life insurance policies. As a result, the company created a new interface that '…helps customers understand their financial health against a wide range of long-term goals beyond pension objectives[xxxvii].'

The ability to help people make their increasingly 'episodic' lives more successful could become a key facet of customer engagement for a range of industries.

"THE RISK OF NOT CHANGING IS NOW MORE SIGNIFICANT THAN THE RISK OF CHANGING"

Implications

- Assets, in many cases already struggling to keep pace with liabilities, will need to both provide more value and over longer time horizons. Longer-term, less liquid assets may be more suitable.
- Products and services will need to serve a widening range of lifestyle choices and circumstances rather than hoping that enough people tread the traditional path.
- Products and services aimed at those entering a once defined period of life post 65 need to account for the array of options now open to the individual and as a result, cannot continue with a one size fits all prescription.
- The standard life stages model is redundant. Failure to adapt and introduce a more sophisticated approach will result in losses.
- What health and wellness ecosystems currently exist? Could we play a role in it, or set one up?
- Would the consumer perception of longer lifestyles create the demand for different products or blended products?
- How can we adjust our mental models – our under-lying assumptions – throughout the organisation?

New Business Model Paradigms

'History warns us that mastering digital technology won't determine which companies become corporate winners', warns Massachusetts Institute of Technology's Sloan School of Management. 'Instead, making the necessary organizational and leadership changes will[xxxviii].' Spanish bank BBVA is one of many who now self-identify as a software company rather than by their original industry, yet have made the requisite organisational changes in the form of new personnel and structure.

"THE OUTCOME OF PRODUCTS IS WHERE FOCUS SHOULD LIE, NOT IN THE DETAILS"

For BBVA and the wider financial world, the risk of not changing is now more significant than the risk of changing. Nowhere is this more true than in insurance, perhaps especially with regards to well-established incumbents. Kodak's story of failing has its roots in its previous success, which made it resistant to change and overly product, as opposed to consumer, focussed. It failed to market its new digital technology despite having a wonderful position from which to do so, for fear of hurting its lucrative film business (gross margins of nearly 70 percent), even after digital products were reshaping the market.

There is a real current risk for banks (and in due course, life and health insurers), of being pecked to death, with 80 percent of existing banking revenues by 2020 at risk[xxxix] by the very platforms they eschewed for years. This is largely due to their misidentifying the problem - most banks continue to mistakenly think that mobile and digital is a project to invest in, not a cultural transformation[xl]. This is not a cognitive issue confined to banking, although some insurers are already integrating consumer-centrism with their technological approach. In Germany, a start-up called Community Life, has '…launched a digital portal which offers simple, transparent disability and term life products, as well as empowering customers to engage in product development.' Since the portal also acts as a broker, the traditional model is essentially turned inside-out[xli].

It is unlikely that highly regulated areas such as insurance are where Google et al will likely, ultimately, want to operate; rather it is the ancillary services that surround the financial system that provide the profit. Leading financial market strategist Chris Skinner therefore asks '…if there is a startup for each service a

bank provides, do we really need banks[xlii]?' The danger of being relegated towards providing the plumbing is a shared threat for insurance. Any incumbent inhabiting a complex legacy position, would be well advised to act on Drucker's assertion that when a market moves, they need to move with it.

80 percent of consumers demand new consumption models[xliii]. Increasingly, the changing nature of consumer engagement and relationships in one part of the economy, is informing expectations and demands in an another. The implications for insurers' business models is simple; the outcome of products is where focus should lie, not in the details. Consumers neither have the time or inclination to become insurance product experts, nor do they care about the complexity or regulatory issues behind the scenes. Customer-centric models should focus on saving consumers' time, help them become more successful.

In some instances success lies in mitigating negative impacts; exoskeletons for example hold great potential throughout the healthcare cycle – including as rehabilitation and mobility for those with back or other issues that prevent them from working[xliv]. Allianz in Australia is likewise trying to improve worker recovery prospects, with its 'injury management framework.' As part of this, its StartSMART initiative includes video-conferencing sessions with a personal wellness consultant over a range of media[xlv].

"NEW CONSUMER MARKETS, NEW FORMS OF MONEY AND NEWLY DISPOSABLE INCOMES WILL NOT, IN ALL PROBABILITIES, INVEST IN THE OLD WAYS OF DOING THINGS"

Industry intermediaries, whether cognitive, digital or in-person, could sit on top of the product silos. Such a positioning could ultimately blur the distinction between life insurance and health insurance, since consumers want outcomes, not policies. Consumer demand is already eroding boundary walls, exemplified by '… the health, food, and beauty markets converging into a consumer products category called wellcare, a segment that is growing rapidly thanks to consumer demand, discretionary health spending, and global technology platforms[xlvi].' It will continue to do so, with the rise of peer-to-peer 'everything' set to transform previously rigid relationships to fluid markets by 2030[xlvii]. A majority of 55 percent of customers would consider peer-to-peer coverage for their life insurance[xlviii]. Disruptive industry trends have already been used to build new business models, as has been shown by Centraal Beheer in the Netherlands[xlix], in its extensive partnerships with start-ups.

Across all industries however, 80 percent of leaders struggle with executing projects that require cross-functional alignment[l]. Basing the industry approach on and around platforms could be a key step in addressing this since 75 percent of insurers already believe that industry boundaries will dramatically blur due to the IoT[li]. Through its cloud partners, Philips (health) aims to rapidly scale up to hundreds of millions of patients, devices and sensors processing an endless flow of data. This platform approach supports an entire ecosystem of interconnected patients, providers and partners and ultimately a $100 billion market[lii].

Successful and strategic use of platforms will require a cultural and organisation change over and above the prerequisite technological one. The creation of APIs and connections with other companies on an equal footing are a necessary starting point for life and health to start building its own network (owned or otherwise). In 2013, 14 of the top 30 global brands by market capitalization were platform-oriented companies[liii]. MIT Sloan notes that as these companies can get closer to their customers, they often develop '…a competitive advantage based on new insights into pricing, network effects, supply chains, and strategy.' In short, platforms could help insurance move from simply selling a product and towards '…adding value and engaging the customer,' and help the 70 percent of CEOs that feel a growing responsibility to deliver on specific customer interests to do so[liv]. Increasingly, this will become a truly global endeavour.

Innovation, both within insurance, and in wider consumer markets, will increasingly develop outside of traditionally core markets. The rising middle class is predominantly an Asian phenomenon: 87 percent of the next billion middle-class entrants will be Asians[lv], and the products that emerge to service them will be free of legacy issues.

In the future, thousands of new ideas are going to come over to the mature economies. New consumer markets, new forms of money and newly disposable incomes will not, in all probabilities, invest in the old ways of doing things.

Implications

- It is plausible that in the future, vendors might only sell insurance when it's packaged together with other services and as part of the broader servicisation trend.
- Business models must start changing now; not in five or ten years' time.
- Failure is a certainty for companies, but not for industries.
- You need to create 'watering holes' around which fintech or instech can come and gather. It is no longer easy to just go out there and partner nowadays; you have to create a 'pull' for tech ecosystems.
- Consumers represent the biggest source of disruption any business faces. Executives now acknowledge that changing customer behaviour and expectations (24 percent) are a bigger source of disruption than technology (21 percent)[lvi]. The experiences consumers favour in leading consumer segments will increasingly inform their expectations in insurance and beyond.
- How could our model be better tilted towards consumer expectations?
- Do we have the groundwork in place to create an ecosystem, or potential partnerships, in areas that can improve our front-end or improve our offerings?

Conclusion

The regulatory issues that underpin the formation of silos within many insurers are far from important for customers who demand outcomes, not details. Data access is excepted, with regulatory issues potentially set to upend many business models and plausibly form revenue streams for ever more quantified consumers.

Technology can enable insurers to design products that shift control of personal data toward consumers, empower them with tools to understand and control the information and also create economic value by helping consumers make personal decisions more effectively[lvii].' Although required, technology alone is not sufficient for change. Basing a company around a given technology is myopic given the rate of technological change. Indeed, a change of priorities must be evident across the executive suite if efforts are not to stall, and collaboration between business units is no longer optional. Cultural change is never easy to enact, and will require supportive measures that codify behaviour change – whether it be through different processes, incentives or new talent in key positions.

The value at stake is enormous and will ensure that insurers bold and daring enough to move out of their comfort zone and create new processes, new models and new forms of consumer value will, in general, prosper. Savvy insurers will be able to access new forms of data sets and assess risk in completely different ways, which has the potential to radically reshape product propositions and create consumer-centric strategies.

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About David Smith

David is recognised as a leading strategic futurist who combines the experience gained from a 35 year IT and business career with strategic visioning to help organisations better prepare for the future. His career has spanned European and US corporations. He is a much sought after keynote speaker and is the author of many works on embracing change and the drivers of change.

Before establishing Global Futures and Foresight, an independent futures research firm, he created and ran the Unisys internal Think Tank, The Global Future Forum. Prior to this he was head of strategic marketing for their $2bn global financial services business.

David and his organisation has been engaged by some of the largest and most prestigious firms from around the world including: The European Commission, NATO, BBC and financial services firms including HSBC, Lloyds/TSB, Atom Bank, RBS, Lloyds, More Than, e-sure, Travelers, Allianz, QBE and Lloyds syndicates along with many other prestigious firms including CSC, Unisys, Cisco, Microsoft, Siemens, Deloitte, Ernst & Young, PWC, Bausch & Lomb, Linpac, Kraft, Heinz, John Lewis, Roche, Philips etc. He is also a regular lecturer at business schools across Europe.

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About Global Futures and Foresight

Global Futures and Foresight is a research and consulting organisation that helps organisations be better prepared to embrace change, innovate and develop new strategies and solutions and helps clients to avoid the risk of being blindsided by external disruptive change.

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