

*Insurance is facing more disruption than any other industry, posing threats for some and opening up promising commercial possibilities for others. What does this mean for your business? Are you equipped to compete?*

# ***Insurance 2020 & beyond: Necessity is the mother of reinvention***





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# Introduction

*In 2010, we began carrying out scenario analysis around the trends reshaping insurance and what the industry would look like by 2020. Our ideas drew on interviews with more than a thousand executives worldwide.*

We put forward our perspectives on the future of insurance at the 2011 International Insurance Society (IIS) Annual Forum in Toronto and followed up with the publication of *Insurance 2020: Turning Change into opportunity*.<sup>1</sup> This introductory paper was followed by a series of perspectives focusing on particular segments such as life insurance, broking and reinsurance, as well as specific drivers of change such as culture and digital developments.

Insurers and industry stakeholders have been using *Insurance 2020* to help them judge the implications of these trends for their particular organisations and determine the strategies needed to respond. *Insurance 2020*'s central message is that whatever organisations are doing in the short-term – whether dealing with market movements or just going about day-to-day business – they need to be looking at how to keep pace with the sweeping social, technological, environmental, economic and political (STEEP) developments ahead.

Now we're at the mid-point between 2010 and 2020, we thought it would be useful to review the developments we've seen to date against our initial projections and look ahead to the major trends coming up over the next five years and beyond.

So where are we now? Insurance is an industry at a pivotal juncture as it grapples with the impact of new technology, new distribution models, changing customer behaviour and more exacting local, regional and global regulations. For some businesses, these developments are a potential source of disruption. The insurance industry leaders taking part in our latest global CEO survey see more disruption ahead than CEOs in any other commercial sector (see Figure 1), underlining the need for strategic re-evaluation and possible re-orientation. Yet for others, change offers competitive advantage. A telling indication of the mixed mood within the industry is that while nearly 60% of insurance CEOs see more opportunities than three years ago, almost the same proportion (61%) see more threats.

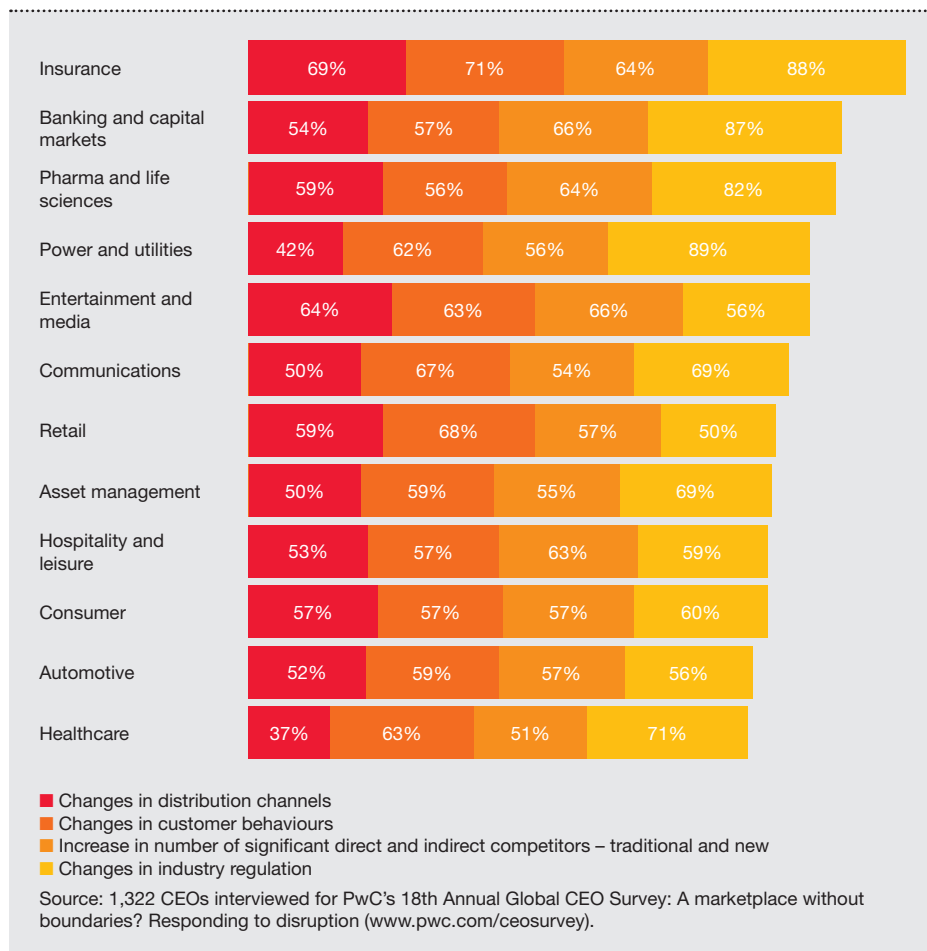
The long-term opportunities for insurers in a world where people are living longer and have more wealth to protect are evident. But they are also bringing fresh competition, both from within the insurance industry, and a raft of new entrants coming in from outside. The entrants include companies from other financial services sectors, technology giants, health care companies, venture capital firms and nimble new start-ups.

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<sup>1</sup> [www.pwc.com/insurance/future-of-insurance](http://www.pwc.com/insurance/future-of-insurance) and [www.pwc.com/projectblue](http://www.pwc.com/projectblue)

**Figure 1: Disruption ahead**

Q: How disruptive do you think the following trends will be for your industry over the next five years?



**67% of consumers taking part in a PwC survey would be willing to have a sensor attached to their home or car if doing so would lower their premiums<sup>2</sup>**

So how are insurers feeling the impact of these developments?

### Customer revolution

The insurance marketplace is becoming increasingly fragmented, with an ageing population at one end of the spectrum and a less loyal and often hard to engage millennial generation at the other. The family structures and ethnic make-up within many markets are also becoming more varied and complex, which has implications for product design, marketing and sales. Reaching out to this splintering customer base and developing relevant and engaging products and solutions present both a challenge and an opportunity for insurers. On the life, annuities and pensions side, this could include broadening the offering by designing targeted plans for single parents or shifting from living benefits to well-being or quality of life support for younger people. On the property and casualty (P&C) side, this could include more

partnerships with manufacturers and service companies. It could also include coverage for different lifestyles, such as flexible pay-as-you-use insurance or providing top-up coverage for people in peer-to-peer insurance schemes.

As the nature of the marketplace changes, so do customer expectations. Customers want insurers to offer them the same kind of accessibility, understanding of their needs, and products that fit their requirements that they've become accustomed to from online retailers and other highly customer-centric sectors. Digital developments offer part of the answer by enabling insurers to deliver anytime, anywhere convenience, streamline operations and reach untapped segments. Insurers are also using digital developments to enhance customer profiling, develop sales leads (e.g. digital profiling and social media dialogue), tailor financial solutions to individual needs and, for P&C businesses in

particular, improve claims assessment and settlement. Further priorities include the development of a seamless multi-channel experience, which allows customers to engage when and how they want without having to repeat the same information with each interaction. Because the margins between customer retention and loss are finer than ever, the challenge for insurers is how to develop the genuinely customer-centric culture, organisational capabilities, and decision-making processes needed to keep pace with ever more exacting customer expectations.

### Digitisation

Most insurers have invested in digital distribution, with some now moving beyond direct digital sales to models that embed the company's products and services in people's lives (e.g. pay-as-you-drive insurance).

<sup>2</sup> A representative sample of 9,281 consumers were interviewed in the UK, US, Canada, Mexico, Brazil, China/Hong Kong, France, India, Singapore, Spain, Sweden, South Africa, Germany, Netherlands, CEE (Central & Eastern Europe) and Switzerland ([www.pwc.com/insurance/digital-life](http://www.pwc.com/insurance/digital-life)).



**68% of consumers worldwide would be willing to download and use an app from their insurance provider<sup>3</sup>**



**70% of insurance CEOs – a higher percentage than in any other industry – see the speed of technological change as a threat to their growth prospects<sup>4</sup>**

<sup>3</sup> A representative sample of 9,281 consumers were interviewed in the UK, US, Canada, Mexico, Brazil, China/Hong Kong, France, India, Singapore, Spain, Sweden, South Africa, Germany, Netherlands, CEE (Central & Eastern Europe) and Switzerland and [www.pwc.com/insurance/digital-non-life](http://www.pwc.com/insurance/digital-non-life).

<sup>4</sup> 80 insurance CEOs in 37 countries were interviewed for PwC's 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption ([www.pwc.com/ceosurvey](http://www.pwc.com/ceosurvey)).

<sup>5</sup> For more on the Internet of Things, go to: [www.worldinbeta.com/blog/internet-of-things-world-in-beta](http://www.worldinbeta.com/blog/internet-of-things-world-in-beta).

<sup>6</sup> 'The rise and interconnectivity of the SAAAME markets', PwC, ([www.pwc.com/gx/en/financial-services/projectblue/rise-of-the-emerging-markets-saaame/rise-of-the-emerging-markets-saaame.jhtml](http://www.pwc.com/gx/en/financial-services/projectblue/rise-of-the-emerging-markets-saaame/rise-of-the-emerging-markets-saaame.jhtml)).

A parallel development is the proliferation of new sources of information and analytical techniques, which are beginning to reshape customer targeting, risk underwriting and financial advice. Ever greater access to data doesn't just increase the speed of servicing and lower costs, but also opens the way for ever greater precision, customisation and adaptation.

As sensors and other digital intelligence become an ever more pervasive element of the Internet of Things,<sup>5</sup> savvy insurers can – and in some instances have – become trusted partners in areas ranging from health and well-being to home and commercial equipment care. In turn, digital technology could extend the reach of life, annuities and pension coverage into largely untapped areas such as younger and lower income segments by reducing costs and allowing businesses to engage with customers in more compelling and relevant ways.

### **Information advantage**

Both traditional and big data availability is exploding, with the resulting insights providing a valuable aid to greater customer-centricity and associated revenue growth. Yet many insurers are still finding it difficult to turn this data into actionable insights. The keys to resolving this are as much about culture and organisation as the application of technology. Making the most of the information and insight is also likely to require a move away from lengthy business planning to a faster and more flexible, data-led iterative approach. Insurers would need to launch, test, obtain feedback and respond in a model similar to that used by many of today's telecoms and technology companies.

A combination of big data analytics, sensor technology and the communicating networks that make up the Internet of Things would allow insurers to anticipate risks and customer

demands with far greater precision than ever before. The benefits would include not only keener pricing and sharper customer targeting, but a decisive shift in insurers' value model from reactive claims payer to preventative risk advisors.

The emerging game changer is the advance in analytics, from descriptive (what happened) and diagnostic (why it happened) analysis to predictive (what is likely to happen) and prescriptive (determining and ensuring the right outcome). This shift would not only enable insurers to anticipate what will happen and when, but also respond proactively. This offers great possibilities in areas ranging from more resilient supply chains and the elimination of design faults to stronger sales conversion rates for life insurers and more effective protection against fire and flood within property coverage.

### **Two-speed growth**

These developments are coming to the fore against the backdrop of enduringly slow economic growth, a continued low interest rate environment and soft P&C premiums within many developed markets. Interest rates will eventually begin to rise, which will cause some level of short-term disruption across the insurance sector, but over time higher interest rates will lead to higher levels of investment income.

On the P&C side, reserve releases have helped to bolster returns in a softening market. But redundant reserves are being/have been depleted, making it harder to sustain reported returns.

The faster growing markets of South America, Asia, Africa and the Middle East together these regions form what PwC terms as 'SAAAME'<sup>6</sup> offer considerable long-term potential, though insurance penetration in 2013 was still only 2.7% of GDP in

emerging markets and the share of global premiums only 17%. Penetration in their advanced counterparts was 8.3%.<sup>7</sup> Rapid urbanisation is set to be a key driver of growth within SAAAME markets, increasing the value of assets in need of protection. Urbanisation also makes it harder for incomers from rural areas to call on the support of their extended families and hence increases take-up of life, annuities and pensions coverage. The corollary is the growing concentration of risk within these mega-metropolises.

### **Disruption and innovation**

Many forward-looking insurers are developing new business models in areas ranging from tie-ups between reinsurance and investment management companies to a new generation of health, wealth and retirement solutions. The pace of change can only accelerate in the coming years as new innovations become mainstream in areas ranging from wearables, the Internet of Things and automated driver assistance systems (ADAS) to partnerships with technology providers and crowdsourced models of risk evaluation and transfer.

At the same time, a combination of digitisation and new business models is disrupting the insurance marketplace by opening up new routes to market and new ways of engaging with customers. An increasing amount of standardised insurance will move over to mobile and internet channels. But agents will still have a crucial role in helping businesses and retail customers to make sense of an ever more complex set of risks and understanding the trade-offs in managing them. On the life, annuities and pension side, this might include balancing the financial trade-offs between how much they want to live off now and their desired standard of living when they retire. On the P&C side,

it would include designing effective aggregate protection for an increasingly broad and valuable array of assets and possessions.

Companies can bring innovations to market much faster and more easily than in the past. This includes the new entrants that are using advanced profiling techniques to target customers and cost-efficient digital distribution to undercut incumbent competitors. It's too soon to say how successful these new entrants and start-ups will be, but they will undoubtedly provide further impetus to the changes in customer expectations and how insurers compete.

In this report, we look at how all these coalescing developments are likely to play out as we head towards 2020 and beyond, as well as outlining the strategic and operational implications for insurers. While we've set a nominal date of 2020, fast-moving businesses are already assessing and addressing these developments now as they look to keep pace with customer expectations and sharpen their competitive advantage. We once again discuss STEEP<sup>8</sup> factors and the scenario analysis that surrounds them as we believe this provides the most coherent and accessible way to map the multiple developments ahead and gauge their implications.

What comes through strongly is the need for reinvention rather just adjustment if insurers want to sustain revenues and competitive relevance. As a result, many insurers will look very different by 2020 and certainly by 2025. As new entrants and new business models begin to change the industry landscape, it's also important to not only scan for developments within insurance, but also maintain a clear view of the challenges and opportunities coming from outside the industry.



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**56% of insurance CEOs – more than in any other financial services sector – see new market entrants as a threat to their growth prospects<sup>9</sup>**

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7 World Insurance in 2013, Swiss Re Sigma.

8 Social, Technological, Environmental, Economic and Political.

9 80 insurance CEOs in 37 countries were interviewed for PwC's 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption ([www.pwc.com/ceosurvey](http://www.pwc.com/ceosurvey)).

# The key STEEP drivers

*In 2010, we envisaged these possible scenarios...*

	Regressive				Progressive
	1	2	3	4	5
<b>Social</b>	Customers predominantly seeking face-to-face interactions with intermediaries.	Distribution disruption in which multiple channels compete for customer interaction.	Distribution disruption where integrated multi-channel interaction is the norm.	Distribution destruction, where customers buy directly from carriers.	Distribution destruction, where self-forming groups of customers negotiate bulk purchases from carriers.
<b>Technological</b>	Insurers face increased data overload, quality and privacy issues, and cyber threats, resulting in a regression to 'gut-driven' decision-making.	Insurers continue to manage information overload and ever-increasing sophistication of analytical techniques that require ongoing investment to keep pace with competitors.	Sophisticated information analytics becomes the key determinant of competitive differentiation, which underwriting talent magnifies.	Sophisticated information analytics, new sources of information (from mobile sensors), and underwriting talent become the key determinant of competitive differentiation.	Sophisticated information analytics progresses to a point where no more useful information can be extracted and all key decision-making has been automated; competition shifts to prevention and productivity gains.
<b>Environmental</b>	With catastrophic events on the rise and insufficient data to accurately predict them, insurers will exit unprofitable areas.	Insurers will continue to rely on catastrophe models, but regulatory restrictions will prevent them from restructuring innovative risk transfer/sharing deals.	Insurers will continue to rely on catastrophe models and sell innovative catastrophe insurance products through securitisation and reinsurance.	Catastrophe modelling gets more sophisticated and uses advanced, early warning technologies to underwrite in specific catastrophe-prone areas.	Advanced early warning technologies and new risk transfer/sharing mechanisms with public and private enterprises reduce human and property loss from catastrophic events.
<b>Economic</b>	The world moves from globalisation to regionalisation and insurers operate in and create products specific to narrow boundaries.	Emerging market insurers grow in scale and importance, and limit opportunities for developed market insurers.	As developed market insurers enter emerging markets, margins in these markets decline.	New emerging market insurers move into developed markets and become global businesses.	Truly global markets with products that are able to integrate multiple parts of the value chain, regardless of location.
<b>Political</b>	Governments in both developed and emerging markets enforce equally burdensome regulations on insurers decreasing their profitability.	Emerging markets introduce more onerous regulations than developed markets, decreasing profitability and limiting control of developed market insurers.	Majority of regulations focused on banks, and insurers in developed and emerging markets are able to get away with minimal regulatory changes to pricing, coverage, rates and reserves.	Emerging markets and developed markets enact less burdensome regulations and emerging markets relax their regulations to ease the entry and control of developed market insurers into emerging markets.	The regulatory climate improves with greater harmonisation across countries (and within states in large countries). Regulatory harmonisation leads to standardisation across products and practices.

Source: PwC analysis



# Social:

## The power of connectivity

*A combination of digitisation, social media and internet comparison means that customers are more connected, better informed and have more purchasing options than ever before. They want products that respond to their needs and are transparent and easy to understand. They also want the convenience of dealing with insurers when, how and where they want. Insurers that are slow to recognise and respond to these demands could quickly lose out to faster moving competitors.*

The shifts in customer expectations that we describe throughout this report present difficult challenges for life insurers, many of whom are caught in a product trap in which excessive complexity reduces transparency and increases the need for advisors. In turn, this creates higher distribution costs, lower sales conversion rates and a squeeze on margins. In many cases, life insurance agents concentrate on relatively well-off and middle-aged customers as they offer the easiest win rates. They are far less likely to target others, including younger and less wealthy people. This failure to reach out to a broader addressable market is compounded by the fact that many younger people are difficult to engage through traditional channels and don't believe life products are relevant to them.

A possible solution lies in models that shift the emphasis from life benefits to promoting health, well-being and quality of life. Increasingly sophisticated sensors allow real-time monitoring of heart rate, blood sugar levels and other potential signs of illness. This monitoring can alert policyholders to health threats and the need for treatment. It also can help insurers develop deeper customer relationships by promoting health and well-being through such aligned services as health advice and gym membership. Offerings that focus on fitness can specifically target younger people, who might not yet be thinking about life insurance. In a foretaste of developments ahead, a large Asian life insurer has shifted its primary mission from insurance to helping people lead healthier lives. This is transforming the way the company engages with its customers. Crucially, it's also giving a renewed sense of purpose and value to the group's employees and distributors.<sup>10</sup>

### **Using data to broaden the insurance offering: Coverage for pre-existing conditions**

In South Africa, a life insurer has been able to focus on new customer segments and offer products to customers with HIV and diabetes. The company stays closely connected to client data through its partnership with medical providers. It also takes steps to ensure customers keep up with their medical appointments and follow treatment protocols. After six months of coverage, customers have been able to realise significant improvements in a range of key indicators of health. The life insurer uses health and customer information to provide committed support to segments that had previously found it difficult or extremely expensive to secure coverage. At a time when many policyholders may be wary of releasing personal information in case it excludes them or raises the cost of insurance, this model shows that a more informed approach can not only enhance underwriting, but also help people with pre-existing conditions to manage their health effectively and live longer lives.

<sup>10</sup> For a more detailed perspective on the options for life insurers, please see 'Reinventing life insurance' ([www.pwc.com/en\\_US/us/insurance/publications/assets/pwc-top-insurance-issues-reinventing-life-insurance-2014.pdf](http://www.pwc.com/en_US/us/insurance/publications/assets/pwc-top-insurance-issues-reinventing-life-insurance-2014.pdf)).



Further developments that could benefit both insurers and customers include knowledge sharing among policyholders. One insurer enables customers to share their health data online to help bring people with similar conditions together and help the company build services for their needs. Similarly, a DNA analysis company provides insights on individual conditions and creates online communities to pool the personal data of consenting contributors to support genetic studies. These communities offer consumers a deeper understanding of health, while insurers have the opportunity to provide tailored solutions based on personal data.

A comparable shift in business models can be seen in the development of pay-as-you-drive coverage within the P&C sector. Telematics subscriptions are expected to grow by around 80% a year to reach more than 100 million worldwide by 2018.<sup>11</sup> Some insurers have gone further by using in-car sensors to measure how safely policyholders drive and offer lower premiums to more careful road users. For some entrants, this is the primary business model. In South Africa, where this model is well advanced, insurers are realising

higher policyholder retention and lower claims costs. There are also important benefits for society by helping to reduce the incidence of serious accidents in a country with one of the highest motor vehicle fatality rates in the world.

This kind of monitoring is now expanding to home and commercial equipment, helping policyholders to make more efficient use of energy and functional capabilities; receive early warning of fire, flood and other risks; and allow them to anticipate breakdowns and seek prompt repair. These developments are paving the way for a move beyond warranty or property insurance to an all-round care, repair and protection service. There are likely to be many more services that could be linked to risk and loss management. These offerings move the client engagement from an annual transaction to something that's embedded in their everyday lives. The more value customers receive from these services, the greater their loyalty and retention and more data means more cross-sell opportunities for the insurer. Agents could play an important role in helping to design effective aggregate protection and servicing for people's ever-growing array of equipment and possessions.

Technology is in many ways a facilitator rather than the driver of these shifts in customer expectation, engagement and service offerings. The growing social economy is a clear case in point. For example, in banking, we've seen rapid growth in peer-to-peer lending. The equivalent in insurance are the affinity groups that are looking to exercise their buying power, pool resources, and even self-insure. While most of the schemes cover property, the growth in carpooling could see them play an increasing role within auto insurance.

### **The social economy comes to insurance: Clubbing together**

A company in Europe is pioneering peer-to-peer insurance. Larger claims are paid by the insurers the company partners with. The big difference is that the company enables friends or people from a social media network to club together to cover the smaller losses that policyholders with conventional insurance would have paid individually out of their deductibles. If no such claims are made over the course of the year, the friends can reclaim a proportion of their premiums. Being friends, they are far less likely to enter trivial or fraudulent claims, which reduces costs overall. They also spread the word to their other friends, which helps the venture to grow, making this an attractive proposition for insurers looking for new ways to bring in customers.

<sup>11</sup> 'Global insurance telematics subscriptions to exceed 100 million by 2018, but auto insurance faces dramatic changes', Association of British Insurers, 6 June 2013.

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# Technological:

## Shaping the organisation around information advantage

*When we analysed the market in 2010, outputs from a new generation of models were being increasingly used within risk selection and pricing. In the intervening years, the investment needed to develop the necessary processing capabilities and draw meaningful insights has drastically declined. As these capabilities become commonplace, the key competitive differentiator is shifting from simply generating insights to how quickly and effectively this information can be turned into action.*

Automation will become an ever more important element of analysis and response as the volume of data and the need to use it outpaces human capabilities.

Insurers clearly recognise the value of big data and other analytical advances. Their investment in new systems and resources reflects this. More than 70% of insurance participants in our 2014 Data and Analytics Survey say that big data and/or analytics have changed the way they make decisions.<sup>12</sup> But many insurers still lack the vision and organisational integration to make the most of these capabilities. Nearly 40% of the participants in the survey see 'limited direct benefit to my kind of role' from this analysis and more than 30% believe that senior management lacks the necessary skills to make full use of the information.

To date, the companies that have been able to make the most of these advanced analytical capabilities have been the newer enterprises, which can design information-driven business models at their inception.

The application of advanced analytics already offers low-cost fund selection, portfolio diversification and tax planning and is increasingly used to help develop holistic, cradle-to-grave financial solutions. The latest generation of models are able to analyse personal, social and behavioural data to gauge immediate demands, risk preferences, the impact of life changes and longer-term aspirations. If we look at pension planning, these capabilities can be part of an interactive offering for customers that would enable them to better understand and balance the financial trade-offs between how much they want to live off now and their desired standard of living when they retire. In turn, this could eliminate product boundaries as digital insights, along with possible agent input, provide the basis for customised solutions that draw together mortgages, life coverage, investment management, pensions, equity release, tax and inheritance planning. Once the plan is up and running, these capabilities can help customers manage their financial affairs more effectively than ever before. This includes automatically adjusting to changes in income or switching some pension contributions to paying forward a mortgage in order to reduce expenditures come retirement.

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<sup>12</sup> [www.pwc.com/gx/en/issues/data-and-analytics/big-decisions-survey/industry/insurance.jhtml](http://www.pwc.com/gx/en/issues/data-and-analytics/big-decisions-survey/industry/insurance.jhtml)

## Technological trends in action: Revolutionising crop insurance

A start-up has revolutionised crop insurance by using a technology platform with a large source of localised weather to dynamically determine weather conditions and yield. Through the use of big data, the company is able to redefine the traditional claims process, which now includes no paperwork and no waiting for a payment.



**93% of insurance CEOs – more than in any other financial services sector – see data mining and analysis as more strategically important for their business than any other digital technology<sup>13</sup>**

### Reactive to preventative

The increasing use of sensors and connected devices as part of the Internet of Things<sup>14</sup> offers ever more real-time and predictive data, which has the potential to move underwriting from ‘what has happened’ to ‘what could happen’ and hence more effective pre-emption of risks and losses. As we’ve seen in the case of sensors, this in turn could open up opportunities for insurers to gravitate from reactive claims payer to preventative risk advisor.

As in many other industries, the next frontier for insurers is to move from predictive to prescriptive analytics (see Figure 2). Prescriptive analysis would help insurers to anticipate not only what will happen, but also when and why, so they are in a better position to prevent or mitigate adverse events. This includes being able to evaluate the impact of future decisions and

adjust model parameters based on the difference between predicted and actual outcomes. For example, insurers could use prescriptive analytics to improve the sales conversion ratio in automated insurance underwriting by continually adjusting price and coverage based on predicted take-up and actual deviations from it. Extensions of these techniques can be used to model the interaction between different risks to better understand why adverse events ranging from drug reactions to supply chain breakdowns can occur, and hence how to develop more effective safeguards.<sup>15</sup>

Further innovation is set to come from the growing use of automated driving systems. This includes forward collision warning, drowsy driver detection and adaptive headlights. Our analysis indicates that these developments could reduce accident claims by at least 10% in developed markets by 2025 and 20% by 2035, though there also would be a resulting drop in premium prices. The advent of a self-driving mode could prove even more revolutionary, though it could be two decades before we see its full impact. Forward-thinking insurers and auto manufacturers will create new opportunities to thrive in this automated environment, while others are likely to see a significant erosion of revenues.<sup>16</sup>

## Using technology to empower the sales force: Mobile insight

Mobile technology offers convenience to customers and is an important new source of connectivity for insurers as more than two billion users worldwide come to access the internet on their mobiles. Mobile also can enhance connectivity within a company’s organisation. A mutual insurer launched an annuity app in 2013 to help advisors understand investment options and product features. As the app grows in usage, it has helped the company to massively exceed sales targets. The way insurers think about their products, distribution and customer interactions is continuing to evolve and companies that can personalise their interactions and offerings are gaining a clear competitive edge.

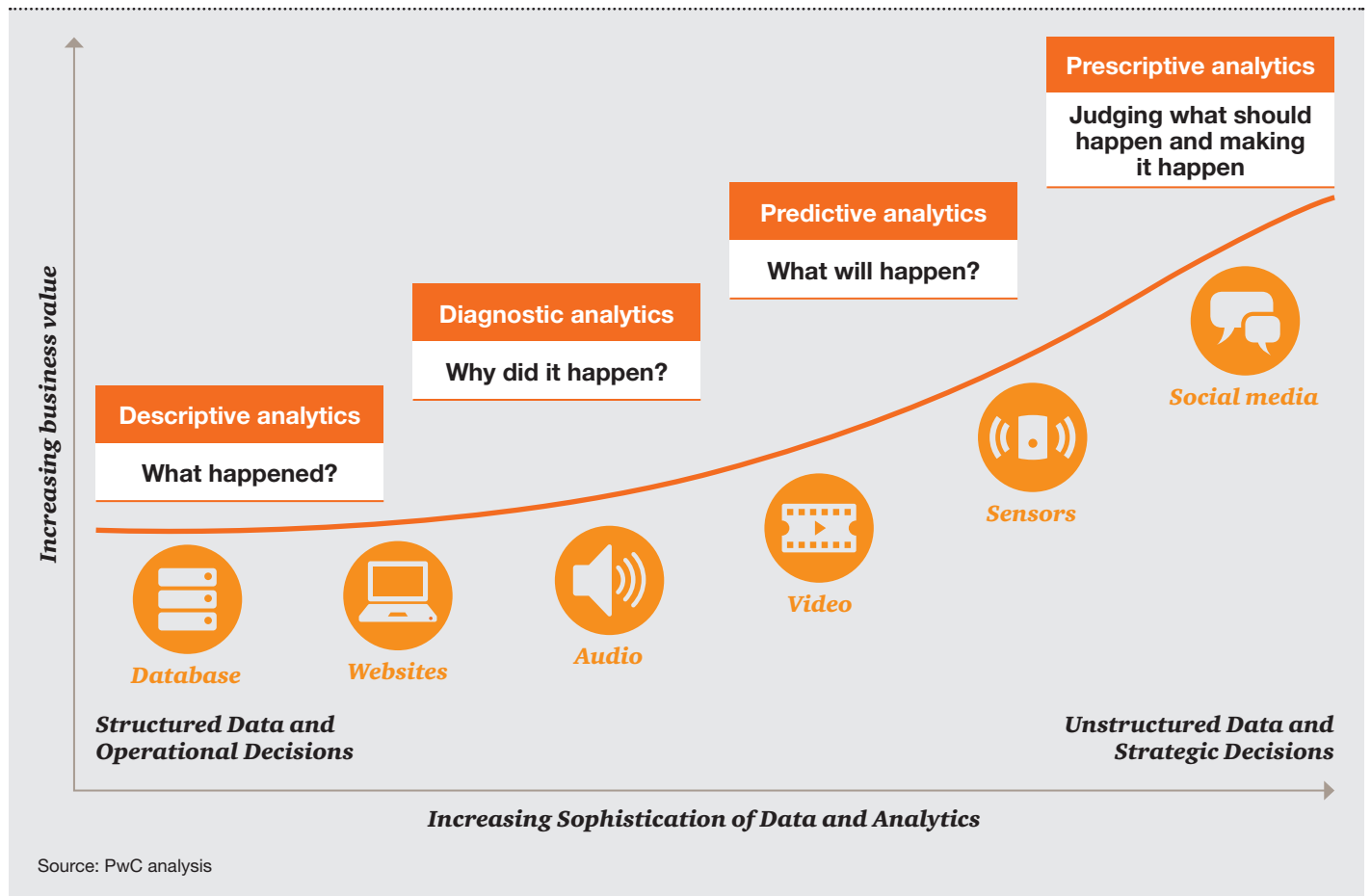
13 80 insurance CEOs in 37 countries were interviewed for PwC’s 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption ([www.pwc.com/ceosurvey](http://www.pwc.com/ceosurvey)).

14 [www.worldinbeta.com](http://www.worldinbeta.com) and [www.worldinbeta.com/blog/internet-of-things-world-in-beta](http://www.worldinbeta.com/blog/internet-of-things-world-in-beta).

15 For a more detailed explanation of the potential please see ‘What comes after predictive analytics’ ([insurancethoughtleadership.com/comes-predictive-analytics/#sthash.4Xu4D1xj.dpbs](http://insurancethoughtleadership.com/comes-predictive-analytics/#sthash.4Xu4D1xj.dpbs)).

16 For a more detailed explanation of the implications please see ‘Potential impacts of automated driver assistance systems (ADAS) and autonomous car technologies on the insurance industry’ ([www.pwc.com/en\\_US/us/insurance/assets/pwc-top-insurance-industry-issues-potential-impacts-of-automated-driver-assistance-systems.pdf](http://www.pwc.com/en_US/us/insurance/assets/pwc-top-insurance-industry-issues-potential-impacts-of-automated-driver-assistance-systems.pdf)).

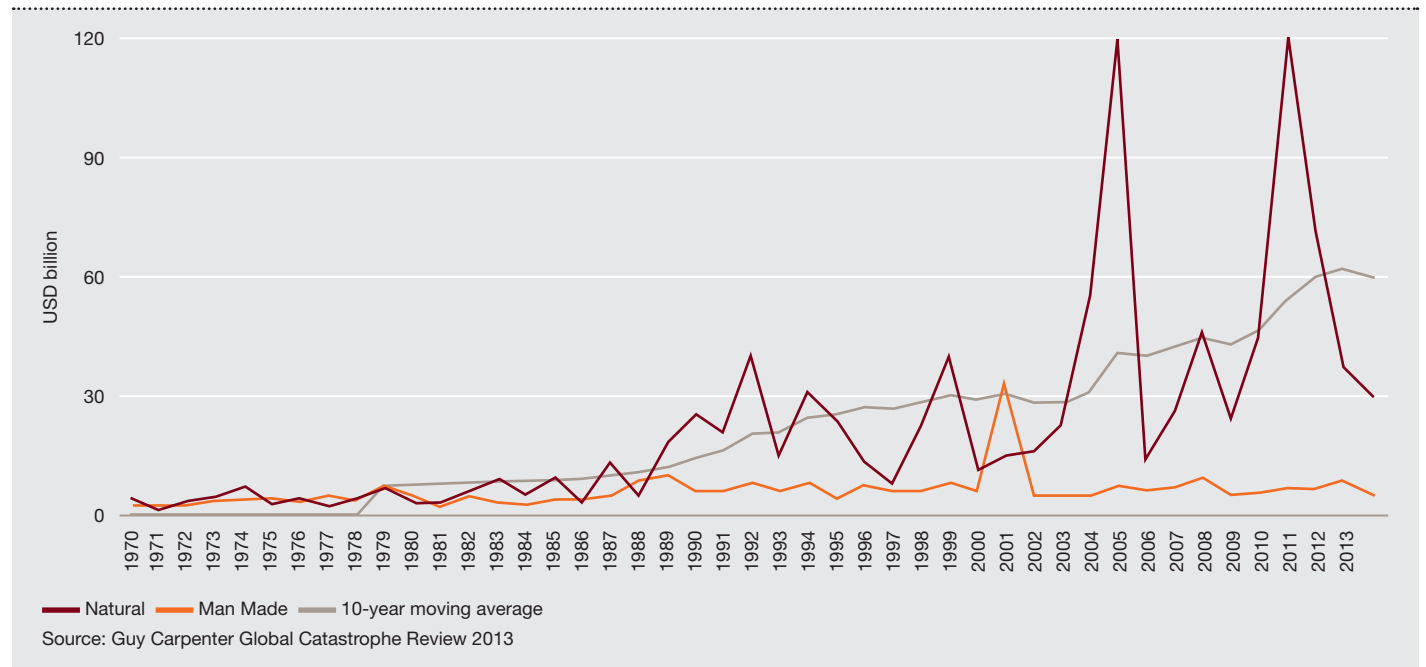
Figure 2: The new frontier of analytics



# Environmental: Reshaping catastrophe risks and insured values

*The world is facing an increasingly complex, uncertain and, in some important areas, under-insured risk environment as climatic instability makes once unthinkable disasters seem almost commonplace.*

**Figure 3: Catastrophe losses**



Catastrophe losses have soared since the 1970s (see Figure 3). In 2014, there were 980 catastrophe loss events, \$110 billion in losses and an insured loss of over \$30 billion worldwide.<sup>17</sup> While 2014 had the largest number of events over the course of the past 30 years, losses and fatalities were actually below average. Globally, the use of technology, availability of data and ability to locate and respond to disaster in near real-time is helping to manage losses and save lives, though there are predictions that potential economic losses will be 160% higher in 2030 than they were in 1980.<sup>18</sup>

In turn, shifts in global production and supply are leading to a sharp rise in value at risk (VaR) in under-insured territories; the \$12 billion of losses from the Thai floods of 2011 exemplify this.<sup>19</sup> A 2013 report by the UN International Strategy for Disaster Reduction (UNISDR) and PwC concluded that multinationals' dependencies on unstable international supply chains now pose a systemic risk to 'business as usual'.<sup>20</sup>

### **Environmental measures to mitigate risk**

Moves to mitigate catastrophe risks and control losses are increasing. In 2014, global investment in green energy reached \$270 billion, a 17% increase from the previous year.<sup>21</sup> Organisations, governments and UN bodies are working more closely to share information on the impact of disaster risk. Examples include R!SE, a UN initiative, which looks at how to embed disaster risk management into corporate strategy and investment decisions.<sup>22</sup>

Governments also are starting to develop plans and policies for addressing climatic instability, though for the most part policy actions remain unpredictable, inconsistent and reactive. In 2014, a major multi-line insurer filed a lawsuit against a local authority in the US in response to what it sees as the city

### **The R!SE initiative**

Recent events have shown the growing impact of natural catastrophes on business. Whether direct losses, supply chain interruptions or wider effects on performance and reputation, these impacts undermine long-term competitiveness and sustainability.

R!SE is a UN initiative, which looks at how to embed disaster risk management into corporate strategy and investment decisions. R!SE seeks to facilitate the exchange of experience and knowledge to implement tangible disaster risk reduction projects through eight streams of activity: Strategies for global business, risk metrics for economic forecasting, industry sector certification, education, principles for responsible investing, resilience of cities, insurance, and resilience of UN programming ([www.theriseinitiative.org](http://www.theriseinitiative.org)).

government's failure to take a more proactive role in addressing climatic instability. The company argued that the city should have adequately prepared for heavier rainfall with an infrastructure that could accommodate the changes in weather. While the insurer ended up withdrawing the lawsuit, the company felt that it raised the important issue in the interest of the its policyholders.

### **Developments in risk modelling**

A new generation of catastrophe models is ushering in a transformational expansion in both geographical breadth and underwriting applications. Until recently, cat models primarily concentrated on developed market peak zones (such as Florida windstorm). As the unexpectedly high insurance losses from the 2010 Chilean earthquake and the 2011 Thai floods highlight, this narrow focus has failed to take account of the surge in production and asset values in fast growth SAAAME<sup>23</sup> markets. The new models cover many of these previously non-modelled zones.

The other big difference for insurers is their newfound ability to plug different analytics into a single platform. This offers the advantages of being able to understand where there may be pockets of untapped capacity or, conversely, hazardous concentrations. The end result is much more closely targeted risk selection and pricing.

17 <http://www.munichre.com/en/media-relations/publications/press-releases/2015/2015-01-07-press-release/index.html>.

18 <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9212.pdf>.

19 Swiss Re Sigma 'Natural catastrophes and man-made natural disasters in 2011', Swiss Re Sigma.

20 'Working together to reduce disaster risk', published by UNISDR and PwC, May 2013 ([www.pwc.com/en\\_GX/gx/governance-risk-compliance-consulting-services/resilience/publications/pdfs/pwc-unisdr-report.pdf](http://www.pwc.com/en_GX/gx/governance-risk-compliance-consulting-services/resilience/publications/pdfs/pwc-unisdr-report.pdf)).

21 <http://fs-unep-centre.org/publications/global-trends-renewable-energy-investment-2015>.

22 [www.theriseinitiative.org](http://www.theriseinitiative.org) and <http://www.pwc.com/gx/en/governance-risk-compliance-consulting-services/resilience/publications/rise.jhtml>.

23 South America, Asia, Africa and the Middle East.

The challenge is how to build these models into the running of the business. Cat modelling has traditionally been the preserve of a small, specialised team. The new capabilities are supposed to be easier to use and hence open to a much wider array of business, IT and analytical teams. Accordingly, it's important to determine the kind of talent needed to make best use of these systems, as well as how they will change the way underwriting decisions are made.

Greater connectivity is enhancing the speed and effectiveness of early warning for catastrophe risks. Emerging developments include new monitoring and detection systems, which draw on multiple fixed and drone sensors. Eventually, these models could be built into resilience and mitigation programmes.

### **Challenges for evaluating and pricing risk**

Beyond catastrophe risks are disruptions to asset/insured values resulting from constraints on water, land and other previously under-evaluated risk factors. There are already examples of industrial plants that have had to close because of limited access to water.<sup>24</sup> Fossil fuel and nuclear power generation are also dependant on access to nearby water supplies.<sup>25</sup> With over a fifth of the world's population, but only around a twentieth of its fresh water, China exemplifies these vulnerabilities.<sup>26</sup> With the bulk of electricity generation clustered in the arid north of the country, power supplies are at particular risk.

### **Applying crowdsourcing in insurance: Sharing information to enhance insight**

Crowdsourcing allows online networks to share data, ideas or content on the one side (Wikipedia is probably its most famous example) or outsource tasks to multiple providers on the other. In insurance, it is already being used to amplify available data. This has resulted in new ways to set statistically based premium rates for pay-as-you-drive policyholders. There is further potential for a combination of crowdsourcing to assess the risks and crowdfunding to provide the capital to support them. Examples of how this might be applied include aggregated insurance buying for people with similar risks (e.g. property coverage for people in flood plains or life and health insurance for people with type one diabetes).



24 Financial Times, 19 June 2014.

25 Reuters, 30 April 2013.

26 PwC 'Gridlines Winter 2013: China's war on water scarcity' ([www.pwc.com/gx/en/capital-projects-infrastructure/assets/chinas-war-on-water-scarcity.pdf](http://www.pwc.com/gx/en/capital-projects-infrastructure/assets/chinas-war-on-water-scarcity.pdf)).



# Economic: Adapting to a multipolar world

*Our 2010 analysis anticipated a marked divergence in the trajectory of insurance market growth between developed and SAAAME<sup>27</sup> markets. If anything, the barriers to growth in developed markets, especially within the Eurozone, have been even greater than expected as insurers have faced a combination of depressed demand, low interest rates and enduringly soft premium rates.*

While some SAAAME markets haven't grown as fast as anticipated, expansion has and will continue to outstrip the developed world. As the influx into cities accelerates, the real distinction will not be emerging and developed markets so much as city and rural areas.

## **Struggling to sustain margins**

The economy is the second most pressing risk for the industry participants taking part in Insurance Banana Skins 2015.<sup>28</sup> The challenging economic climate has held back discretionary spending on life, annuities and pensions, with the impact being compounded by low interest rates (third on the list of banana skins) and the resulting difficulties in sustaining competitive returns for policyholders. Potentially higher capital charges for guaranteed products could further drive up costs and erode returns in many markets. A further source of uncertainty and risk is the future of quantitative easing and the impact this could have on equity values. The keys to sustaining margins are likely to be simple, low-cost, digitally distributed products for the mass market and use of the latest risk analytics to help offer guarantees at competitive prices.

The challenges facing P&C insurers centre on low investment returns and a softening market. One facet of this market cycle is pressure on both rates and exposure bases. There are a number of reasons for this, most prominent of which are debt levels that have reached all-time highs. With consumers and corporations in so much debt, they have less capacity to spend, and lower overall spending equates to lower exposure bases (i.e. lower revenue, which leads to lower payroll and less area used for production). While reserve releases have helped to bolster returns, there is now much less financial cushion within many insurers' reserves to justify further releases.

Opportunities to seek out new customers and boost revenues include strategic alliances. Nearly half of the insurance industry leaders taking part in our latest global CEO survey plan to enter into a new joint venture or strategic alliance over the next 12 months.<sup>29</sup> Two-thirds, much more than in other financial services sector, see these tie-ups as an opportunity to gain access to new customers. Business networks, customers and suppliers are the most important focus for strategic collaborations. Examples could include affinity groups, manufacturers or major retailers. A further possibility is that one of the telecoms or internet giants will want a tie-up with an

<sup>27</sup> South America, Asia, Africa and the Middle East.

<sup>28</sup> 806 industry participants from 54 countries were interviewed for Insurance Banana Skins 2015, a unique survey of the risks facing the industry, which was produced by the Center for Financial Services Innovation (CFSI) in association with PwC ([www.pwc.com/insurancebananskins](http://www.pwc.com/insurancebananskins)).

<sup>29</sup> 80 insurance CEOs in 37 countries were interviewed for PwC's 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption ([www.pwc.com/ceosurvey](http://www.pwc.com/ceosurvey)).

insurer to help it move into the market. Such companies are already setting up their own insurance arms and working with insurers to develop market comparison sites.

More than 30% of insurance CEOs now see alliances as an opportunity to strengthen innovation and gain access to new and emerging technologies.<sup>30</sup> Examples include the partnership between a leading global reinsurer and software group, which aims to provide more advanced cyber risk protection for corporations.

Surprisingly, only 10% of insurance CEOs are looking to partner with start-ups, even though such alliances could provide valuable access to the new ideas and technologies they need. There are also opportunities for insurers to invest in start-ups or provide the finance to help them put their ideas into operation, either in partnership with venture capital firms or through their own investment funds. The challenge is how to align objectives and get people from different industries to ‘talk the same language’.

### SAAAME<sup>31</sup> growth

Growth in SAAAME insurance markets will continue to vary. Slowing growth in some major markets, notably Brazil, could hold back expansion. In others, notably India, we are actually seeing a decline in life, annuity and pension take-up, in this case as a result of the curbs on commissions for unit-linked insurance plans (ULIP). Further development in capital markets will be necessary to encourage savers to switch their deposits to insurance products.

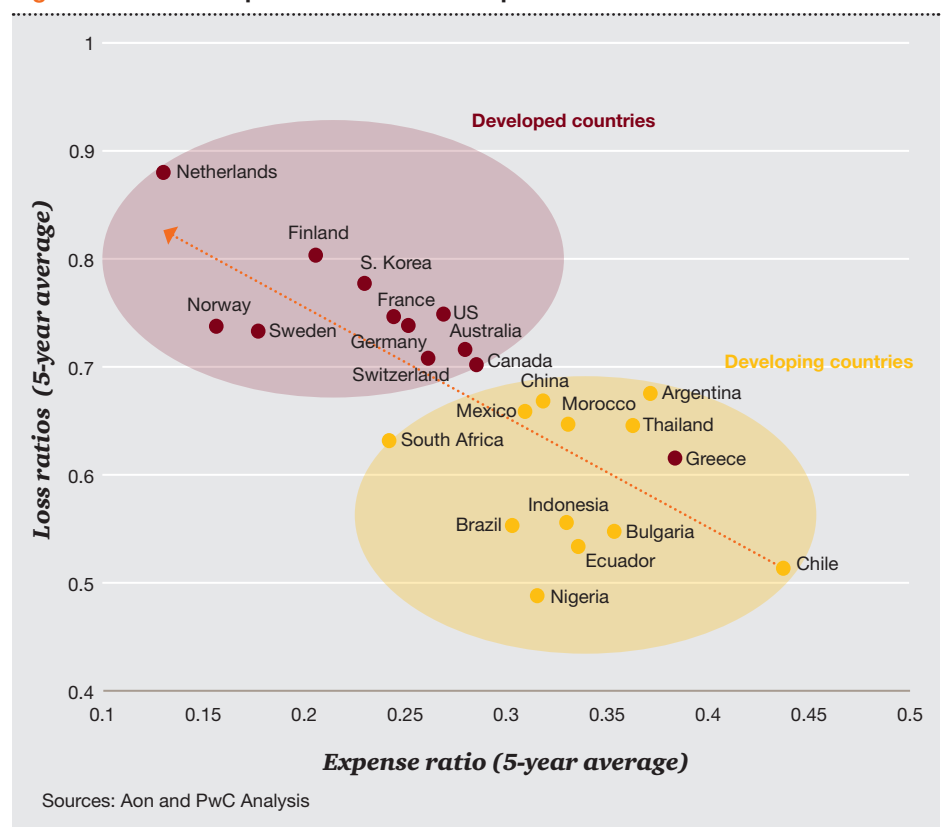
As Figure 4 highlights, the relative under-development of SAAAME markets means that loss ratios are generally lower than those in their developed counterparts, but expense ratios are higher. As the reliance on agency channels adds to these costs, there are valuable opportunities to offer cost-effective digital distribution, drawing on the increase in both basic mobile and more sophisticated devices in these markets. Successful models of inclusion include an Indian national health insurance programme, which is aimed at poorer households and operates through a public/private partnership. More than 30 million households have taken up the smart cards that provide them with access to hospital treatment.<sup>32</sup>

The already strong growth (10% a year<sup>33</sup>) in micro-insurance is also set to increase, drawing on models developed within micro-credit. The challenge for

insurers is the need to make products that are sufficiently affordable and comprehensible to consumers who have little or no familiarity with the concept of insurance. They also will have to extend their risk evaluation and claims infrastructure to often under-developed and inaccessible areas.

Assessing and pricing risk appropriately is difficult when risk data remains limited within many SAAAME markets. In the absence of pricing accuracy and adequacy, SAAAME markets will not realise their growth and profit potential. Rather than waiting for a market-wide alignment of data and pricing, some insurers have moved people onto the ground to build up the necessary data sets, often working in partnership with governments, regional and local development authorities, along with banks and local business groups.

**Figure 4: Relationship between loss and expense ratios**



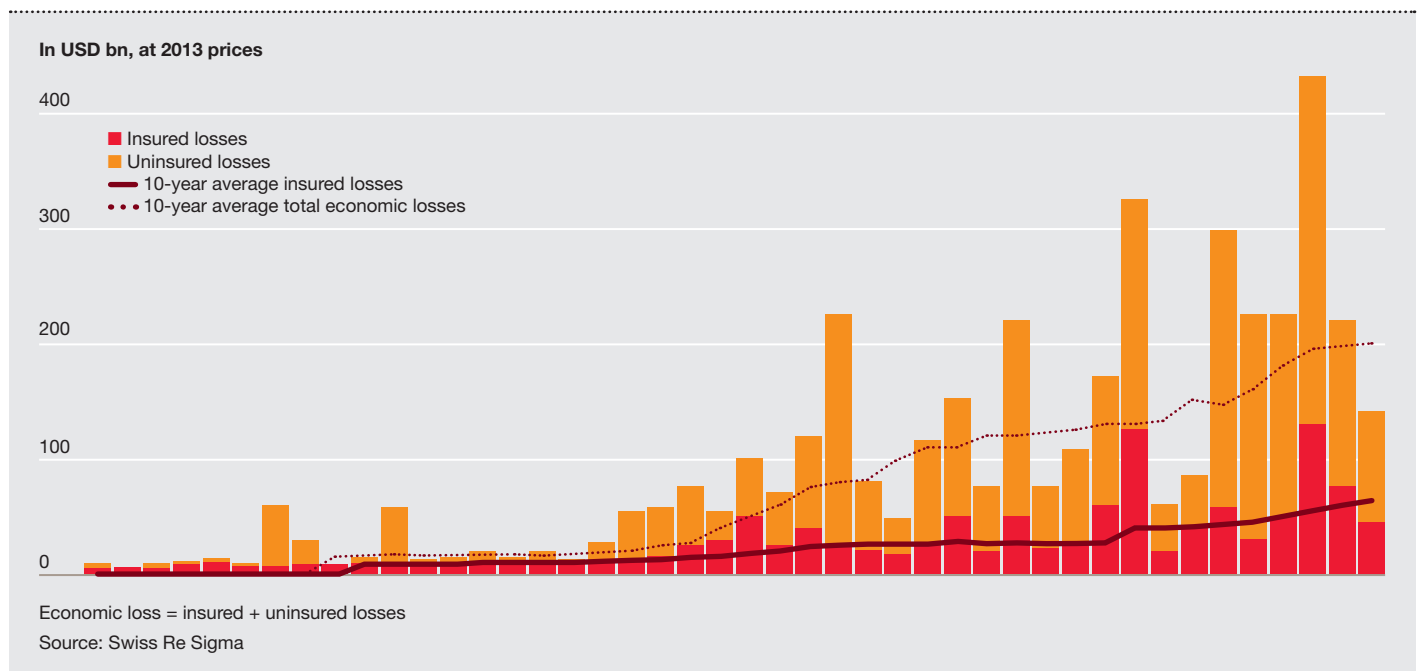
30 80 insurance CEOs in 37 countries were interviewed for PwC's 18th Annual Global CEO Survey: A marketplace without boundaries? Responding to disruption ([www.pwc.com/ceosurvey](http://www.pwc.com/ceosurvey)).

31 South America, Asia, Africa and the Middle East.

32 Rashtriya Swasthya Bima Yojana website ([www.rsby.gov.in/about\\_rsby.aspx](http://www.rsby.gov.in/about_rsby.aspx)), 27 May 2015.

33 Exploring opportunities in micro-insurance, Lloyd's: ([https://www.lloyds.com/~media/lloyds/reports/360/360%20other/insuranceindevelopingcountries.pdf](https://www.lloyds.com/~/media/lloyds/reports/360/360%20other/insuranceindevelopingcountries.pdf)).

**Figure 5: Insured versus uninsured losses**



### Urbanisation

The urban/rural divide may actually be more relevant to growth opportunities ahead than the emerging/developed market divide. In 1800, barely one in 50 people lived in cities. By 2009, urban dwellers had become a majority of the global population for the first time.<sup>34</sup> And this will be more and more the century of the city as 1.5 million people are added to the urban population every week, with the bulk of this growth centred in SAAAME markets.<sup>35</sup> Cities are in turn the main engine of the global economy, with 50% of global GDP generated in the world's 300 largest metropolitan areas.<sup>36</sup>

The result is more wealth to protect. Infrastructure development alone will generate an estimated \$68 billion in premium income between now and 2030.<sup>37</sup> In turn, the growth in city populations will spur greater take-up of insurance as urban citizens are more likely to be exposed to insurance products and have access to them. Urbanisation is also likely to increase purchases of life, annuities and pensions products as people migrating into cities have to make individual provision for the future rather than relying on extended family support.

Yet as the size and number of mega-metropolises grow, so does the concentration of risk. Key areas of exposure go beyond property and catastrophe coverage to include the impact of air pollution and poor water quality and sanitation on health. Most of the new mega-metropolises are dangerously under-insured.

### Tackling under-insurance

Just as macro-economic trends will have an important influence on developments in the insurance market, insurance is essential for sustained profitability and growth in the economy. Figure 5 highlights the economic impact of under-insurance by showing the growth between insured and uninsured losses.

A Lloyd's report comparing the level of insurance penetration and natural catastrophe losses in countries around the world found that, among them, 17 fast-growth markets had an annualised insurance deficit of \$168 billion,<sup>38</sup> creating threats to sustained economic growth and the ability to recover from disasters.

Within developed markets, the risk of under-insurance is heightened by a tendency to look at the price rather than the value of insurance. As a result, there is insufficient protection against

both existing and emerging risks. Cyber security is a case in point, affecting organisations of all sizes. Our annual survey of security, IT and business executives shows that there were 43 million global security incidents detected in 2014. This is the equivalent of more than 100,000 attacks a day, every day. As the number of incidents, costs and brand damage continues to grow, the pressure to protect sensitive information is mounting. While insuring against cyber-attacks is a critical area of focus, many corporations lack the sophisticated methods to understand their risk and evaluate, select, and acquire the best cyber insurance products. The challenge for insurers is both in understanding the relevant risk and helping companies understand that traditional security practices are no longer enough.

34 Urban population growth, World Health Organisation ([www.who.int/gho/urban\\_health/situation\\_trends/urban\\_population\\_growth\\_text/en/](http://www.who.int/gho/urban_health/situation_trends/urban_population_growth_text/en/)).

35 United Nations Department of Economics and Social Affairs, Population Division (2012).

36 Brookings Institute, 2012.

37 'Urbanisation in emerging markets: boon and bane for insurers', Swiss Re Sigma, 2013.

38 Lloyd's and the Centre for Economics and Business Research, Global Underinsurance Report, 27.11.12 ([www.lloyds.com/news-and-insight/riskinsight/underinsurance-report](http://www.lloyds.com/news-and-insight/riskinsight/underinsurance-report)).

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# Political:

## Adapting to heightened instability

*Governments play an increasing role in the insurance market. This includes more regulation. As governments look to scale back spending, more and more responsibility for pensions and health care is being passed to individuals and their employers, opening up considerable room for growth in the insurance market.*

### **Government in the tent**

At a time when all financial services businesses face considerable scrutiny, strengthening the social mandate through closer alignment with government goals could give insurers greater freedom in how they operate, innovate and pursue profitable opportunities. Insurers could also be in a stronger position to attract quality talent at a time when many of the brightest candidates are looking for more meaning from their chosen careers.

Government and insurers can join forces in the development of effective retirement and health care solutions. However, this will open insurers up to greater state influence, media scrutiny and reputational risk as a result. There could be particular conflicts between higher capital demands and the pressure to provide affordable retirement and healthcare policies. The risks are heightened by tighter customer protection regulation and supervision in many countries; notable examples being the establishment of the Financial Conduct Authority (FCA) in the UK and the Consumer Financial Protection Board (CFPB) in the US.

Further opportunities include a risk partnership approach to managing exposures that neither insurers nor governments have either the depth of data or financial resources to cover on their own, notably cyber, terrorism and catastrophe risks.

### **Impact of regulation**

The latest wave of regulatory change isn't only creating huge operational disruption, but also calling into question longstanding strategic certainties. Costs, prices and returns could soon become unviable if the changes aren't managed effectively. Regulation is the number one risk in Banana Skins 2015.<sup>39</sup>

Insurers have never had to deal with an all-encompassing set of global prudential regulations comparable to the Basel Accords governing banks. But this is what the Financial Stability Board (FSB) and its sponsors in the G20 now want to see as the baseline requirements for not just the global insurers designated as systemically risky, but also a tier of internationally active insurance groups. The FSB has assigned the International Association of Insurance Supervisors' (IAIS) to create guidelines for the supervision of the global systemically important insurers (G-SII). Separately, the IAIS has also been focusing on large globally active insurers through the

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<sup>39</sup> 806 industry participants from over 50 countries were interviewed for Insurance Banana Skins 2015, a unique survey of the risks facing the industry, which was produced by the Center for Financial Services Innovation (CFSI) in association with PwC ([www.pwc.com/insurancebananaskins](http://www.pwc.com/insurancebananaskins)).



### ***A more unstable world***

Globalisation would appear to have brought the world together through increasingly interconnected trading relationships, though others argue that if anything, it has heightened the potential for conflict. From the crisis in Ukraine to the rise of ISIS, instability is a fact of life. Pressure on land and water, as well as oil and minerals, is intensifying competition for strategic resources and potentially bringing states into conflict. The ways these disputes are playing out is also impinging on corporations to an ever greater extent, be this trade sanctions or state-directed cyber-attacks.

Globalisation isn't about to unravel. But there is a growing realisation within major corporations that they are dependent on political collaboration and goodwill. The more widespread their operations, the harder it is to forge and manage the necessary relationships. Businesses, governments and individuals also need to understand the potential causes of conflict, their ramifications and develop appropriate contingency planning and response. At the very least, insurers should seek to model these threats and bring them into their overall risk evaluations. For some, this will be an important element of their growing role as risk advisors and mitigators. Investment firms are beginning to hire ex-intelligence and military figures as advisors or calling in dedicated political consultancies as part of their strategic planning. More and more insurers are likely to follow suit.

development of a common framework (ComFrame) for the supervision of all internationally active insurance groups (IAIGs), which includes a common capital standard.

The G20's close focus on insurance regulation highlights the heightened politicisation of financial services. Governments want to make sure that taxpayers no longer have to bail out failing financial institutions. The result is an overhaul of capital requirements in many parts of the world and a new basic capital requirement for G-SIIs. The other game-changing development is the emergence of a new breed of cross-state/cross-border regulator, which has been set up to strengthen co-ordination of supervision, crisis management and other key topics. These include the European Insurance and Occupational Pensions Authority (EIOPA) and the Federal Insurance Office (FIO) in the US.

Dealing with these developments requires a mechanism capable of looking beyond basic operational compliance at how new regulation will affect the strategy and structure of the organisation and using this assessment to develop a clear and coherent company-wide response.

As regulatory demands continue to mount, technology will be increasingly critical in curbing the cost of compliance. Technology is also going to be crucial to regulators' ability to oversee a more digitised insurance industry and keep pace with its broadening scope, be this new entrants, new innovations or moves into new business areas. Risks could be analysed in real-time and predictive models would enable supervisors to identify and hone in on areas in need of intervention. Regulators would also be able to tap into the surge in data and analysis within supervised organisations, creating the foundations for machine-to-machine regulation.

# Implications for the future of your business

*The main developments we've seen in the insurance industry in recent years have followed the direction of travel outlined in our 2011 report, **Insurance 2020: Turning Change into opportunity**.<sup>40</sup> The pace of change looks set to accelerate still further.*

From the impact of analytics, digitisation and more exacting customer expectations to the disruptive effect of regulation, geopolitical instability and two-speed global economic growth, the insurance marketplace will look very different in 2020. Facing mounting commoditisation and pressure on prices, forward-looking insurers are already developing ways to capitalise on higher margin opportunities and enlarge their footprint in fast growth SAAAME markets. The future belongs to businesses that can make sense of the gathering transformation and develop a proactive response rather than simply reacting to events.

While some of the drivers of change in the insurance industry are common to all business lines, we believe that the impact will be seen in different ways and occur at different speeds. So what are the implications for each key insurance segment and how can businesses capitalise on them?

## **Property and casualty personal lines**

- A combination of automated underwriting and competition from aggregators and new entrants will drive down prices and accelerate the commoditisation of motor, property and other core business lines. At the same time, new opportunities will continue to open up through new information-based models, both within traditional areas of insurance coverage and new fields, such as maintenance and concierge services. This 'home intelligence' could pave the way for a broader range of concierge services built around a combination of customer knowledge and sensor technology.
- Some customers might go further by giving the insurer – or information company, which might be a better description for this evolving business model – access to much of their personal data, which the company would use to tender for a range of personalised services on the customers' behalf.
- Pressure on costs will make agency channels less economically viable and could lead to digital becoming increasingly dominant. But there will continue to be a strong role for agents in helping people to understand and manage what can often be complex protection needs. People may own more, but often have less time to manage the risks, be this damage, theft or breakdown, making the agent a valuable partner.

<sup>40</sup> [http://www.pwc.com/en\\_GX/gx/insurance/publications/future-of-insurance.jhtml](http://www.pwc.com/en_GX/gx/insurance/publications/future-of-insurance.jhtml).

- Opportunities for partnerships exist with travel companies and motor manufacturers, with insurance forming part of a bundled service. However, such partnerships could limit the insurer's opportunities to build customer relationships and take advantage of policyholder data.
- Data from car and equipment diagnostics, along with user behaviour, will be exchanged with manufacturers and repairers, breaking down commercial boundaries and opening up further opportunities in design and maintenance. Further instances of this new ecosystem of information and assets include the integration of home sensor data with utilities' and emergency services' systems.
- We estimate that the reduction in accident, personal injury and other auto-related claims as ADAS technology becomes more widespread could reduce annual auto insurance losses in a developed market such as the US by at least 10% by 2025. But the risk and claims profile would be more complex as the driver switches between self-driving (and hence driver liability) on the one side and ADAS driving (and hence product liability) on the other. While there are regulatory prohibitions on autonomous driving at present, it may eventually not just be permitted in many countries, but even obligatory, especially in high-risk situations.
- Revenue models will shift from premiums to premiums plus subscriptions in offerings such as maintenance, prevention and vehicle management.

### Commercial lines

- As the risk environment and client demands continue to evolve, commercial lines insurers have considerable growth opportunities in areas such as cyber risk and supply chain risk. Holistic analysis opens the way for broader risk prevention and mitigation discussions with both agents and policyholders.
- Alternative risk transfer will continue to develop and expand, moving beyond catastrophe into areas such as cyber and supply chain risk.
- Advanced analytics that help to quantify exposure change patterns could help to mitigate the frequency of accidents, business interruption and other losses.
- Given the potential for sharply rising losses and ever more complex loss drivers, there will be a growing need for co-ordinated risk management solutions that bring together a range of stakeholders, including corporations, insurance/reinsurance companies, capital markets and policymakers across the globe. For some of these risks, such as cyber risk, some form of risk facilitator, possibly the broker, will be needed to bring the parties together and lead the development of effective solutions.<sup>41</sup>

### Life, annuities and pensions

- The focus of life coverage will shift from life benefits to promoting well-being and quality of life, with this new model combining digital data and partnerships with gyms, diet and fitness advisors and health care providers. Well-being benefits are likely to appeal to typically affluent segments that tend to focus on

staying fit and healthy, including both younger and active older customers. For a sector that has had significant challenges attracting young, single, healthy individuals, this represents a great opportunity to expand the life market, as well as attract older customers who normally would think it is too late for them to purchase life products.

- Advanced analytics will enhance the precision, customisation and flexibility of financial planning and risk protection, paving the way for solutions that easily adapt to life changes and stretch beyond insurance to cover a comprehensive range of financial needs.
- Sensor technology will lead to increasing integration between insurers and health care providers, marked by information exchange, better understanding of risks and costs and the potential to not only make cover for people with pre-existing conditions more accessible, but also improve health and prolong life.
- Life coverage will shift to shorter term contracts. At present, typical life insurance contracts are for the long-term. However, this is a deterrent to most customers today. Moreover, behavioural economics shows us that individuals are not particularly good at making long-term saving decisions, especially when there may be a high cost (i.e. surrender charges) to recover from a mistake. Therefore, individuals tend to delay purchasing or rationalise not having life insurance at all. With well-being benefits, contract durations can be much shorter – even only one year.

<sup>41</sup> For a more detailed exploration of the issues please see 'Broking 2020: Leading from the front in a new era of risk' ([www.pwc.com/insurance/broking2020](http://www.pwc.com/insurance/broking2020)).

## Scenario one: Property and casualty in 2025



### **All-round prevention and protection**

“I got a text in the morning saying there’s a potential fault with the boiler. But, by the time I got home, it was fixed,” says Akil Badem from Istanbul. “I don’t worry about breakdowns anymore, because I know that my insurer will have it all sorted out.”

Akil’s boiler, security and other home equipment are all connected to automated sensors that optimise performance and minimise fuel usage. The connected devices can also detect potential faults and, if they can’t be put right automatically, alert the nearest repair and maintenance team. No more breakdowns, no more waiting. The comprehensive coverage provided by market leader, There When You Need, also takes care of all Akil’s transport requirements, including best price bus and rail fares, a car when he needs one, and insurance that automatically adjusts to how far he travels, his speed, the road type, and other risks, and whether he or the automated driving system is in control of the car. “It’s just so easy. A couple of clicks on my mobile and it’s all up-and-running. I can’t believe how people got along before,” he says.

“In 2015, we saw that everything was changing in our marketplace, be this how auto insurance is underwritten or the possibilities opened up by the Internet of Things,” says Grace Nkomo, CEO of There When You Need. “We knew that if we used the technology to change how we connect with and serve our customers, we could create an early mover advantage that we’ve maintained ever since.”

## Scenario two: Life, annuities and pensions in 2025



### **Fit for the future**

“I’ve never felt better,” says Karen O’Neil from Seattle. “Every time I go to the gym, the cost of my health insurance and life coverage comes down. My insurance company even got me a great deal on trainers.”

Karen’s lifestyle, health and financial planning coverage is designed to make it easier to stay healthy, manage her finances and plan for the future. A wearable sensor monitors key aspects of her health and alerts her to fitness advice and any medical issues that need following up. The health care and life insurance package includes tie-ups with gyms, well-being counsellors and sportswear providers, putting the emphasis on how to stay fit and healthy, as well as medical and life benefits when they’re needed. There is also a savings plan that puts aside any money left over from the rent, food and other outgoings and automatically adjusts investments to market movements and Karen’s investment goals. “At 29, I thought that these kind of schemes were for people a lot older and wealthier than me,” says Karen. “But my personalised package helps me to feel good now – and I know can adjust as my needs change.”



## *Scenario three: Commercial insurance in 2025*



### **Advanced risk detection averts cyber-attack**

Remote monitoring centres operated by a major insurance company have thwarted a co-ordinated attack on a retail group's online network. Cyber gangs were planning to bring down the group's server and then hack into the accounts of its millions of customers. The insurance company's monitoring centres were able to not only detect the breaches, but protect the server from damage and ensure business carried on as usual.

The cyber protection forms part of a comprehensive 'business as usual' risk management package, which automatically anticipates and responds to any problems in supply, customer service and reputational integrity. The service is designed to zero in on any threats and take pre-emptive action. Advanced risk evaluation and pricing analytics enable the insurer to take account of multiple existing and emerging risk factors and determine a dynamic price based on the cost of reducing and mitigating the risks, as well as transferring the risks in alternative risk transfer markets. Monitors continuously track real-time events (e.g. geo-political, technology, environmental, and social events) around the world to build an accurate and evolving qualitative profile of the exposures facing clients and how they can be proactively managed.

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# How to design your business strategy to face the future

*The question is no longer how much insurance is set to change, but how should, and how quickly can businesses respond. The key differentiators will be the ability to keep track of emerging developments and assess their implications, as well as being able to respond quickly and agilely.*

The actions that insurers choose to take will depend not only on their national or regional markets, but also on their strategic intent, core capabilities, availability of talent, capital and organisational culture. Yet, for many – if not most – insurers, this changing market is likely to require a significant change in products and the redesign of long-established business models. This will not be easy.

It's important to develop a clear vision of where and how the business intends to compete. For some, it could include a wholly new value proposition. For life insurers, this could include a broader and more compelling offering built around quality of life and well-being on the one hand and the targeting of untapped segments on the other. For P&C companies, this could include assessing opportunities to enhance data and risk monitoring and looking at how this information could apply to a broader range of risk prevention and protection needs.

Having established strategic intent, it's important to determine how to target individuals through different messages and channels, simplify product design, and re-engineer distribution and product economics. Further considerations include how to reshape the underwriting process to capitalise on new analytics and sensor information, as well as steps to make the sales and policy administration process more straightforward and real-time.

Such is the speed of market developments that it's virtually impossible to predict what customer demand will look like in a few years' time. Old approaches to strategic planning and execution may be too slow to keep up with the pace of change. Instead, we propose a four-step LITE (Learn-Insight-Test-Enhance) approach to marketing, distribution, product design, new business, operations, and servicing.

- **Learn** your target segments' needs
- Build the models that can provide **insight** into customer needs
- **Test** innovations with pilots to see whether they resonate with customers and refine the value proposition
- **Enhance** and roll out the new value proposition for specific segments

Using this approach, developments that would have taken years now can be brought to market in a matter of months, if not weeks, and then assessed, adapted, and discarded/expanded to meet changing market needs.

The result will be a much faster and more responsive business, capable of keeping pace with customer demands and capitalising on unfolding commercial opportunities. In conclusion, the future could and should be bright for insurers. They have opportunities to engage more closely and become a much more valued and intrinsic part of people's lives, be they individuals, families or businesses. Insurers will have more information upon which to create smart solutions and serve a broader range of needs. The challenge is how to make sure they capitalise as this will also be a much more open and potentially less loyal marketplace.

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# What does the future hold for your business?

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*This report only covers a little of the picture and there is much more to share and discuss. If you would like to explore the trends further and assess how they will affect your business please speak to your usual PwC contact or one of the authors listed here:*

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