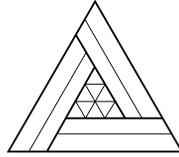


David Smith  
Global Futures & Foresight



# FUTURE OF INSURANCE





## About The Author



### David Smith

 david.smith@thegff.com

 dasmith

 davidsmithgff

David is recognised as a leading strategic futurist who combines the experience gained from a 35 year IT, marketing 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.

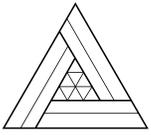
David and his organisation has been engaged by some of the largest and most prestigious firms from around the world including: The European Commission, NATO, BBC and financial services firms including HSBC, Lloyds/TSB, Atom Bank, Lloyds, RBS Insurance, More Than, e-sure, Travelers, Allianz, QBE and Lloyds syndicates, ACORD, 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, Ogilvy etc. He is also a regular lecturer at business schools across Europe.

### 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.

<http://www.thegff.com> tel: +44 (0) 1372 210941, +44(0) 7932 408901

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# Future Underwriter

*The future of insurance and the wider environment*

Despite being the arguably first industry based around big data, insurance and its various components – including underwriting - are little changed from 20 or 30 years ago. This reticence to change is no longer tenable; corporate clients and consumers alike are rapidly changing, as is the nature and vector of the risks they encounter. While new skills are clearly required, a more transformational result is required. This means investment that helps reposition the very role of underwriting itself, in fact McKinsey suggests this ‘...has never been more important.’

The most obvious route for such change, given the rate of data generation, is through machine learning and other artificial intelligence enabled processes. However, one in three insurance executives remains unconvinced by such technologies ability to radically redraw both underwriting and the industry more broadly; only 63 percent suggest intelligent technologies will usher in complete transformation<sup>ii</sup>.

Such figures are alarming, since robotic process automation, machine learning, and advanced analytics are already enabling insurers and insurtechs to improve underwriting profitability and predictability as well as provide greater transparency to brokers and customers. These may not by themselves be transformative, but the next iteration of A.I, combined with the formation of third-party marketplace data and the burgeoning Internet of Things (IoT) arguably represents the future of underwriting.

Consider, for example, that almost half of insurance customers around the world indicate a willingness for insurers to use data from social media companies and health monitoring apps in return for cheaper premiums<sup>iii</sup>. Imagine this writ large, with the IoT and commercial customers. Many insurers, however, remain poorly placed to enact such transformations at scale and to develop truly customer-centric propositions as a

result. This lack of dynamism, whether deliberate or accidental, has a cost; the share of customers open to buying insurance from new entrants, including those from outside the industry, range from above 90 percent in Thailand and Mexico, above 70 percent in the UK and 60 percent in the U.S.<sup>iv</sup>. Across all geographies, millennials display a higher propensity to consider new entrants’ offers. A failure to transform now, starting with the underwriting process, will guarantee a death by a thousand cuts as a horde of networked insurtechs coalesce, all focusing on doing one thing better than the incumbent. The future ecosystem requires new roles, skills and mentalities: in other words, a complete transformation from the traditional approach.

## Challenges To The Current Role

Current predictions suggest that by 2020, smart sensors and other IoT devices will generate at least 500 zettabytes of data<sup>v</sup>. Such volumes are set to overwhelm many existing systems and structures. As a result of both the inadequacy of current data architectures and the ability of data to provide personalization, increasing automation is almost assured. In terms needs analysis and underwriting, not to mention conversational A.I interfaces, automation will be used to both replace parts of the underwriters tasks while augmenting others<sup>vi</sup>.

A.I based data engines can ‘...predict the distribution of potential losses on the basis of a few factors at an early stage in the underwriting process<sup>vii</sup>’. This not only helps develop a deep database<sup>viii</sup> of intelligence to tap in future situations, but also has the benefit of allowing new KPIs to be met by the underwriter and thus has implications for staffing. This will likely become the new normal. Accenture notes that ‘...more than 90 percent of insurers are using, planning to use, or considering the use of, machine learning or AI in claims or

underwriting processes.<sup>viii</sup> This makes sense from both strategic and operational perspectives; anything from 30 to 40 percent of an average underwriter's time is '...spent on administrative tasks, such as rekeying data or manually executing analyses.'<sup>x</sup>

In some cases, the underwriting itself can be almost fully automated. In a pilot program with Church Mutual Insurance Company, '...an IoT capability provided by Hartford Steam Boiler saved policyholders more than \$500,000 by avoiding property losses from frozen pipe leaks.'<sup>v</sup> Meteo Protect, an insurance and reinsurance broker dedicated to weather risk management, '...has created an app that lets customers select their

policy specs, including geolocation, coverage period, and weather parameters. The company then uses an in-memory computing platform to aggregate weather-related data, analyze risks, and price and underwrite the policy – all in real time.'<sup>i</sup>

The IoT ties into consumer-centrism in a number of important ways. For one, IoT applications could enable insurers to not only improve their underwriting processes but reach new markets and craft new propositions. Traditional customers could become partners, not just relating to data but in areas such as distribution. For example, Accenture suggests that '...the industrial organization may conveniently deliver insurance through its service platform.'<sup>xiii</sup>

Less extreme scenarios also change the nature of underwriting. Several digital underwriting solutions have already been pioneered by insurtechs, several of which could benefit underwriters. For example,

## Friendsurance

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*Marketed as a social insurance solution, Friendsurance puts consumers into groups that are incentivized to be honest and accurate when they claim.*

*As more claims come through, so the cash reward diminishes.*

*This supports underwriters by reducing the number of false claims and allowing for targeted policy pricing.*

## Habit Analytics

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*Data sourced from smartphones and connected devices at home is used to create behavioral patterns that help insurers make decisions regarding services, products and risk models.*

*Leveraging real-time data allows for enhanced underwriting models and optimized pricing decisions.*

## Goji

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*Positioned as a platform that uses personal history to help purchasers connect with the best insurer available at the best cost, Goji delivers that data to a group of major underwriters.*

*By including driving history as a part of the application, insurers are able to provide quick quotes on the individual based on a score.*

*This minimizes risk for the underwriter by allowing for accurate, selective pricing.'<sup>xiii</sup>*

## The Future Role

McKinsey notes that continued ‘...underwriting excellence requires a relentless focus on five essential building blocks: portfolio steering, pricing adequacy, risk selection, capacity optimization, and coverage design<sup>xiv</sup>.’ It is critical to acknowledge, and plan for the strong likelihood that these ‘building blocks’ will in turn become increasingly data dependent and driven.

Underwriters will be well placed to use machine learning and other A.I systems to monetize many of the new data streams that they use. In total, Accenture estimates that insurers ‘...could generate as much as \$28 billion in the next five years by monetizing data, algorithms and platforms<sup>xv</sup>.’ To this end, China’s Baidu’ is in the midst of a project aimed to apply A.I beyond the confine of its search engine ‘...to assist in creating insurance plans and calculating consumer loans. Since machine learning et al can identify the patterns needed to help reduce risk<sup>xvi</sup>, how you do things is set to become as important as what you actually do.

As evidenced with Baidu’s move, the broader adoption of A.I and the IoT will revolutionize the speed at which underwriting occurs. Given enough contextual data – and arguably not much is needed – it is plausible that ‘pay as you go’ type insurance of varying lengths will become reality, as will ‘on/off’ policies that can be recalculated in real-time to reflect context<sup>xvii</sup>. Some movement around these concepts is already visible with regards to the sharing economy, for which MunichRe and others have developed solutions.

Part of the need for machine learning and predictive analytics to be based at the heart of the underwriting function is that insurance’s old ways, of relaying on historical data, will not cut it with new areas, such as cyber. Emerging and future risks have too little data to allow for retrospective underwriting and wrongly handled could represent billion-dollar liabilities, especially with regards to cyber-insurance. Another key issue highlighted by Majesco’s Denise Garth is that ‘...perpetually-evolving attributes within specialized risks necessitate continuous underwriting as opposed to underwriting at inception or renewal<sup>xviii</sup>.’ Time,

efficiency, cost and relevance and the underwriting process all favor automation.

It should be acknowledged that there is no single formula for future success, given the variation in underwriting operating models depending on such factors as region, client size, industry, product and even the size or age of the given underwriting function. Where data is freely available, the risk non-complex and homogenous, absolute automation has a clear economic rationale<sup>xix</sup>. More complex risk may see more of a balance between human and machine led underwriting, with the underwriter working alongside A.I systems to help measure and price an array of risks<sup>xx</sup>. This could see the underwriter move beyond the digital age to the intelligent one.

Given the crowded nature of many marketplaces and the insurance ecosystem itself, the attempt to decommo-ditize offerings is an attractive one. Chiefly by offering ancillary services or data derived insights, underwriters could expand their services. Nine out of ten insurance buyers, for example, suggest they would ‘welcome receiving additional business-support services,’ through their insurance company<sup>xxi</sup>. This inevitably places more emphasis on developing a greater quality and/or quantity of third-party relationships. Building such collaborations and offerings - and incorporating them into the evolving underwriting value proposition – represents a glass ceiling for many. Many insurers skills in this area do not match their ambition. In any case, this need and the shift it represents denote a dramatic shift for the industry and the new capabilities needed to thrive within it.

## Future Skillset

Skills are relatively easy to learn or acquire, but changing established mindsets is of a magnitude more difficult. No matter how well targeted investments in re-skilling are, they are unlikely to succeed in and of themselves. Crafting a new mindset that enables the underwriting role to be reinvented is required, thus helping ‘...establish underwriting as an expanded, more exciting role that matches the pace and complexity of today’s world<sup>xxii</sup>.’ Part of this may see them charged with revisiting and improving existing statistical

approaches, utilizing swathes of data and machine learning approaches<sup>xxiii</sup>.

The need for data-science skills, even if insufficient in isolation, goes without saying. It should be likewise for the creation of a new approach to change management that can help shift people from the same workflows, patterns and processes that have defined the job for the last 20 or 30 years. Arguably this is the biggest roadblock for yielding the benefits of various emerging technologies within the function and the carrier itself.

That said, most insurers remain unable to attract the type of talent needed to carry out the transformation needed in underwriting capability and the insurers more broadly. Primarily this is because top end digital talent is in short supply but high demand, with other financial services players and big tech able to satisfy monetary and workplace needs and wants.

The remedy, in part, lies with the need for the very top layers of insurance leadership to address the talent pipeline holistically. This means an inherent appreciation that underwriting of the future, as with pretty much all key insurance roles, will require a different approach and skillset than has traditionally been the case. Workplace design, the provision of technology, the 'social' mission of the insurer and the nature of the work itself must all be distinct from what has gone before if insurers are to find themselves a destination for top talent. Engaging Millennials and Gen Z in the very transformation programmes they are there to ostensibly help drive could be critical in developing a new workplace culture and leveraging a degree of outside-in thinking.

The mismatch between the industry's view of itself and others perception of it, as well as the gap between some of the core skills of the future compared to current realities are further exemplified in the approach to ecosystems. 84 percent of insurance executives suggest that ecosystems are important to their business strategy, and 54 percent report actively seeking ecosystem opportunities. These figures appear broadly encouraging, since 97 percent of insurers also think they are attractive ecosystem partners.

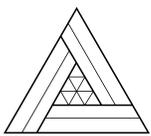
However, less than 5 percent are classified by Accenture as 'ecosystem masters<sup>xxiv</sup>.' Overall strategy, culture, technological adoption and how these combine to allow innovation are all lacking as per the study – comfort working across blurring organisational boundaries is not something you can easily train for.

It is unlikely that new underwriting roles can be successfully introduced against such a backdrop. The change of underwriters' roles demands a change of skills at CEO level too. Not only must CEOs prioritize the identification of potential insurtech partners and develop win-win propositions, but also ready the workforce for new ways of working. This task, broadly speaking, should also be the remit of the board, with tech skills and understanding at the board level no longer optional. Heidrick and Struggles suggest that while '...there probably will not be an all-transforming Uber of insurance...there may be a Netflix of insurance—senior executives and boards must figure out how to give customers what they want, when they want it, and how they want it<sup>xxv</sup>.' Only then can each insurance organization designate its future roles and skills.

## Key Questions For The Future

- Insurance was arguably the first industry predicated on big data. How do we attract the new wave of digital talent? Are we prepared to shift our culture and staff roles to a degree that proves attractive?
- We need c-suite leadership and buy-in to re-wire decision making, not just in underwriting, but across marketing, sales, pricing, customer experience management, and claims management<sup>xxvi</sup>. What is the best way to structure this? At insurers' executive committee meetings?
- To better position itself for the ecosystem era, Accenture recommends such steps as '...including a clear ecosystem strategy that would '...either reinvent or completely disrupt the existing insurance value chain to improve their competitiveness<sup>xxvii</sup>.' Are we ready to do this? What role does underwriting assume in such circumstances

- Are we truly a data driven organization? What does this mean in an era of ecosystems?
- Do we have the leadership necessary to guide multiple changes across the organization, and perhaps best exemplified with the underwriting function?
- Does our talent strategy and talent pipeline provide for innovation or continuation? Are we tapping the right places for future talent?
- Can we retrain for future roles and skills, or is a fundamentally different mentality required?
- As an underwriter, am I well positioned for change? What additional skills or experiences will I need? What do I envisage my future role being?



## Future **Brokers and Agents**

*The future of insurance and the wider environment*

Insurers are generally aware of the challenges and opportunities inherent in the unfolding changes impacting the industry. 75 percent of insurers, for example, believe that industry boundaries will dramatically blur due to the IoT and other platforms. This will shift sources of competition and potential collaboration as coverage evolves into a broader value chain containing new services, products and risk pools<sup>ii</sup>.

The impact is likely to be felt differently, according to the organizations size, the specific sector they operate in and their role. The one commonality is that all sectors, and roles within them need to take-action now<sup>iii</sup>. Agents and brokers are not exempt from this.

In a wider consumer and business environment where trust, transparency and connectivity are increasingly important, there is almost unanimity with 86 percent of insurance consumers saying they are not very satisfied with communications from their provider<sup>iv</sup>. 44 percent report a complete absence of communications from their insurance provider in the last 18 months, while 36 percent of consumers rate the honesty and ethical standards of the insurance salesperson as low or very low<sup>v</sup>. This perception, whether fair or not, is not a strong position from which to face the future.

### Challenges To The Current Role

A wave of changes to the insurance ecosystem, ranging from customers' changing needs and wants, to costs and emerging competition, are forcing insurance agencies toward a digital service model<sup>vi</sup>. In many cases, newly emerging competitors are better placed to deliver such models at scale.

In Germany for example, 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<sup>vii</sup>. Does this mean that the broker and agent role is potentially rendered irrelevant?

That case has certainly been made, with Russ Alan Prince suggesting that A.I will eliminate the need for the majority of life insurance agents in a Forbes piece<sup>viii</sup>. Citing cost efficiencies and the gradual comfort of insurers using A.I, he sees insurance companies as gradually able to eliminate the agent's commission. It is likely however, that augmentation with A.I is as likely as outright replacement automation, with research showing the '...agency/agent connection is unique to earn customer loyalty, and that a loyal insurance

customer delivers a whopping seven times the lifetime value of a low loyalty customer and three times the value of a neutral customer.<sup>ix</sup> Agents and brokers fluent in analytics and working alongside machine learning and other forms of artificial intelligence would appear the optimum settlement.

Given the role of A.I in driving efficiencies and the need to retain a human touch for some market segments, it is likely that future ready agencies will feature heavy automation. Rather than outright labour replacement, machine learning could be used to augment human agency with qualified leads and analytical capabilities. Ultimately, this could help craft a more consumer-centric proposition, with unmet needs and even lifetime solutions identified.

There are exceptions, however. It has been noted that ‘..by 2024, roll-out of 5G on the ground, as well as OneWeb and Starlink in orbit are bringing 4.2 billion new consumers to the web—most of whom will need insurance.’ Yet some predict that, ‘...because of the changes afoot in the industry, none of them will buy policies from a human broker.’ This is perhaps especially true for any time-limited micro-policy, which could swell in popularity with 5G prompting more contextual, location-based policies. Since tomorrow’s products and services will differ from today’s, it makes sense for the distribution to differ too.

In a broader sense, artificial intelligence usage could also improve the workplace conditions of agents and brokers. Research by Ecclesiastical in 2018 suggests that brokers are more likely to suffer stress than other financial sector workers<sup>x</sup> while 56 percent of brokers also expect stress levels to rise over the next three years . Given the low percentage of millennials – 4 percent<sup>xiii</sup> – aiming for an insurance career, an improved workplace experience would seem vital in ensuring there is enough talent in the pipeline. 35 percent of U.S brokers say slowness to innovate is a factor making the industry appear less attractive to younger workers, thus future innovation needs to include workplace design<sup>xiv</sup>.

Increasing numbers of organisations are focusing on the mental health and wellbeing of their

employees with the above statistic demonstrating the need for brokerages to be on the forefront of such change. Artificial intelligence can not only augment human workloads, relieving the more monotonous tasks and allowing workers to focus on more value adding and rewarding tasks, but also add impetus to the changing nature of where, how and with who work gets done.

Other technologies will reinforce a change in agents and brokers roles. The rise in volume and velocity of consumer data and the ability of predictive and prescriptive analytics to provide insight into this is critical for future agencies. They must also understand how consumer technology is shifting expectations, while the same technologies allow players from adjacent industries to disrupt and reshape the traditional insurance value chain. Set against this large-scale picture of change is the aging of insurance agents themselves. For example, in the US, the average age of agents is 56 and recruiting the next generation has proven challenging. The potential lack of digital talent willing to countenance an insurance career forms, perhaps, the greatest risk of long-term disintermediation for agents and brokers; technology will likely find a way when humans are unwilling.

## The Future Role

There is likely no one size fits all role that future agents and brokers will ascribe to, but rather a multitude depending on market, geography, size and a host of other issues – not least concerning other ecosystem players’ evolving roles. Some agents may merely see a technologically driven efficiency shift to which they adapt, while others will see what it means to be an insurance agent or broker change more profoundly. For example, one possibility is that we ‘...see blurred lines whereby traditional independent agencies will become insurance agency come solutions providers.’<sup>xv</sup>

In this vision, increasing consumer expectations allied to innovation in the insurance product space leads to a growth in ancillary insurance partners, leading the agency to ‘...almost becomes a brand-new ecosystem – this multi-disciplinarian shop.’<sup>xvi</sup> The alternative to ‘developing’ their own

system is for brokers or agents to participate in other emerging ecosystems, even those that appear to be redefining what it is that an agent or broker does.

One such example is with Tides, a distributed network of P2P insurance, that decentralizes all insurance company functions<sup>xvii</sup>. In doing so, the landscape for both carriers and brokers opens up, both in terms of challenges and opportunities. New roles could be born, ‘...for example, the insurance broker could become a pool administrator. Even though their role as a conduit of information will disappear, the broker will have a new administrative role where they will eventually be able to make more money if they drive lots of demand into Tides<sup>xviii</sup>.’

Either way, given the evolving demands of both carriers and customers, together with evolving technological possibilities, brokers and agents most look to do more. Doing different things – in this case offering new services – cannot be successfully done using traditional methods. Machine learning and the IoT are the obvious means which can change, not just the nature of the work brokers do but also the niche markets they could potentially reach and the services they are able to offer their clients.

To this end, agents ‘...have got to start to evolve into a sales-distribution, community-based, brand-based, both digitally and out in the community<sup>xix</sup>. The lines between agency types is also likely to blur, with pure-play brick-and-mortar agencies becoming less prevalent: how we do things will become just as important, if not more, than what we do.

## Future Skillset And Talent

It is perhaps unsurprising given these changes that 51 percent of brokers are fearful about the future of their business<sup>xx</sup>. Certainly, there is the theoretical scope for blockchain, machine learning and person-to-person (P2P) platforms to effectively downgrade the skills needed to belong to the agency or brokerage professions, much in the same way that front line bank staff have seen a change in required skills over the last 30 or 40

years. Even in the scenario of artificial intelligence largely augmenting brokers and agents, it is entirely possible that fewer will be needed as leads and cases per agent rise, just as increased penetration of insurance globally could see these numbers rise.

79 percent of brokers suggest that the rush of new technologies and automation is placing a premium on personal relationships for clients<sup>xxi</sup>. While ‘soft,’ or professional, skills will remain paramount, brokers should be cognizant of the changing nature of engagement.

IoT derived data, for example, is not just a route to better determining or interdicting risk, it is a potential game-changer in terms of customer engagement. If value is provided for the consumer, more intensive, targeted customer contact could replace the sporadic nature of contact agents currently enjoy and shift their business model further. This will likely generate a new set of demands, for one, skill sets will need to change as brokers accept the need to establish partnerships in the value chain and then work closely with partners to combine business processes and exchange data. In some instances, this will require organizational buy-in and purposeful design, but in a general sense brokers will require a greater sense of cross-boundary collaboration.

Brokers and agents will also require a greater technological grounding. This starts with an understanding of where and how technology can be used to engage the customer as part of building a more consumer-centric service. The more agencies develop skills that leverage tech the more room – and ability - they will have to advise their customer around the moments that matter.

In the broad context, this means contextual advice as new moments emerge. 49 percent of U.S brokers ranked Russian cyber hacking as the biggest potential global threat to their clients<sup>xxii</sup>, a concern reflected elsewhere such as in the UK, where nine out of ten insurance brokers regard data breaches as the single biggest risk to their customers . Interdicting such moments could prove critical in the broad shift of insurance moving from compensation to prevention. On a more prosaic level, those working with data such as brokers

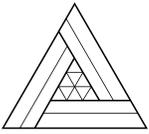
and agents will need to understand the basis of such data as well as receive more rigorous data security training<sup>xxiv</sup>.

It is also worth considering how agencies can attract the future of talent, as well as the nature of that talent. It is likely that a fully digital and intelligent workplace will likely be a minimum requirement for attracting future talent. Insurtech might well provide the opportunity for brokers to develop less reliance on a centralised workplace. Insurtech has the double benefit of delivering the access

to technology that millennials and Generation Z demand, since 75 per cent of millennials feel they need technology to be effective at work<sup>xxv</sup>. A strong digital workplace experience is a likely prerequisite for encouraging Millennials and Gen Z workers, but greater attention to some of the social aspects that motivate these generations, will also help. The workplace experience – on a cultural, organisational and technological level - must be comparable to peer industries such as banking and big tech if incumbents are to develop the talents and skillsets the industry will need.

## Key Questions For The Feature

- Are we ready to renew the agency? Do we have a plan for the future?
- Are we monitoring changes that directly and indirectly impact the role of brokers and agents? Do we, for example, keep tabs on how Chinese players are rewriting the roles and balance between technology, agents/brokers and other insurance roles?
- Are the insurers we work, or else our own agency, with looking to improve access to on the job training?
- Are they ready to invest in the future role and capacity of agents, with a more holistic recruitment, onboarding and retention strategy?
- Do we deliver digital experiences that compare favorably with leaders in other industries? In addition, are these experiences transparent and simple to understand?  
Inefficiencies practices and processes in distribution are a drag on the entire insurance ecosystem and unlikely to survive digital transformation efforts one way or another. Where can we as brokers and agents best intercede, with automation, A.I and other technologies, to boost agency productivity?
- What would an outside-in, consumer-centric agency look like?
- New business models, such as P2P insurance are challenging and in some cases replacing traditional brokerage relationships. How can we become part of these emerging ecosystems and what role would we play within them?
- Are we sure our current skillset and role will last in the face of all these changes? How do we best ensure new opportunities arise from these changes, as opposed to challenges?



# Changing Role of Marketing

## *The future of insurance and the wider environment*

The ongoing digital revolution and the emerging intelligent era are rewriting the rules of business, and with it, redesigning organizational and business model structures. What insurers do, how they do it, and who they partner with are all changing. Marketing reps need to stay a step ahead if they are to remain an important part of the emerging insurance ecosystem.

A radical era of transparency, connectivity, heightened consumer expectations and artificial intelligence bring great opportunity and challenges for marketers in the insurance industry. At times the opportunities and challenges will stem from the same development. Take, for example, the 4,756 IoT connections that are made every minute. The number of connected things in use could go up to 25 billion by 2021, from 14.2 billion in 2019<sup>ii</sup>. By 2025, we are forecast to interact with connected devices 4,800 times per day<sup>iii</sup>. The data that flows forth will not just change the nature of the insurance product or service, but radically alter how as marketers we engage with both corporate and individual clients. This should allow for personalization at a minimum, yet the flip side is of overwhelmed data architectures, problems of data silos and consumer trust and privacy issues. For plethora, read tsunami; for personalization, read intrusion and for unprepared marketers, a potential headache.

Nevertheless, one of the principle drivers of personalization - AI - will likely move from being an attractive adjunct to a mission critical platform. AI is a prerequisite for generating insight from the vast array of data, much of it unstructured, as well as acting at speed to deliver timely contextualized offers and personalized service<sup>iv</sup>.

### **Challenges To The Current Role**

As well as allow for marketing reps to do things differently, it also compels them to do different

things. Activities that account for 10 percent to 15 percent of a typical marketing executive's time can be automated by using currently demonstrated, let alone future, technology<sup>v</sup>. Such savings, if fully realized, could free up marketing reps for other tasks, yet in the wider marketing world this largely remains unrealized, with not even 40 percent of marketing departments reporting adoption of AI into their strategies<sup>vi</sup>.

It is worth acknowledging that in many cases, the rate of development in A.I means its sophistication '...has already advanced further and faster than most marketers' ability to actually make use of them<sup>vii</sup>.' This leaves little time before market leaders are likely to have synthesized a highly effective and automated marketing function. Deloitte believes that marketing, being, '...highly quantitative, targeted and tied to business outcomes, will likely become highly automated by 2025.' Using data and even tech such as facial recognition, AI is already able to create highly-personalized experiences at scale in real-time.

Bernd Schmitt of Columbia Business School, thinks '...it's entirely possible that marketing, branding and creative tasks may be done by supercomputers<sup>viii</sup>,' in the not-so-distant future. Predictive and personalized services cannot be done at scale without significant data investment and some sort of automation, whether in the analysis of such data or just in the organization of campaigns.

Part of the need for A.I lies in the expanding omnichannel and hence sources of data, which also present marketers with a range of opportunities. 70 percent of personal lines insurers believe that voice assistants will be the next big customer channel, for example<sup>ix</sup>. Of critical import will be the need to create a compelling customer experience that alone acts as marketing. Absent a screen, this will necessitate a new approach and design features that align to the target groups preferences.

Conversational commerce will, however, produce a rich seam of data for those with the trust of the consumer, the aptitude to process it and the desire to act on it in ways that benefit both the consumer and organization.

For insurers, there are definite benefits from consumer use of voice assistants as they ‘...stand to fill a widening gap between consumer demands and faltering personalization features.’ It does however further empower the consumer to a degree many traditional marketers will be uncomfortable with. Messages could be blocked, engagement attempts thwarted and ROI warped. To this end, it is possible that marketing and engagement will be bundled in some ways with products and services.

## The Future Role

The promises of personalization – including greater returns and happier customers – has led what S&P Global Market Intelligence and Kantar Strategy dub a marketing arms race among U.S. P&C carriers over the past decade. The top five are now spending upward of a combined \$4 billion on marketing annually<sup>xi</sup>. Despite this, 44 percent of customers report no interactions with their insurers during the prior 18 months<sup>xii</sup>.

Marketing will become central in efforts to transform the insurance industry. Aviva is hoping to rely on a twin strategy; of ‘...using data and technology to address customers’ biggest pain points while marketing moves the conversation away from price and towards service, the level of cover and the claims process.’ Given that 80 percent of insurance customers are willing to use digital and remote channel options for different tasks and transactions, this make sense<sup>xiii</sup>. For Aviva, this has meant addressing their legacy systems, and even looking to self-disrupt aspects of their own business model<sup>xiv</sup>.

Adjusting to the speed of the consumer will take significant investment in technological and human resources since several changes impact a wide range of insurance personnel. 47 percent of current smartphone shoppers already suggest they would like a service that automatically restocks everyday items. Almost two thirds of them think most people

will have a personal shopping advisor in three years<sup>xv</sup>.

There is no reason to suggest these expectations won’t in time evolve to include personal financial advisors. The confluence of advanced A.I and evolving voice related technology could see consumers automating or delegating swathes of the decision and purchasing cycle for much of their activities. How to reach the consumer, engage and break through will all be complicated by such developments<sup>xvi</sup>.

Indeed, when trust and automated feedback issues are considered, it may mean that some brands are never considered by some consumers. Automated algorithms will compel insurers and their ecosystems to compete against each other electronically, but even within this space, such systems could completely block out brands that don’t meet an individual consumers’ criteria. This could be along a range of existing and emerging inputs, from environmental impact of investments to social sustainability or employee treatment – all of which could be ranked increasingly in real-time.

Engaging the consumer will become a problem once automated systems are employed by both consumers and businesses. Algorithms will increasingly be making the offers; and deciding if they are beneficial for (or even seen by) individual users too. This would fit with the more than half of smartphone users who expect operators to anticipate their needs even before they realize what they are . Globally, nearly one in three consumers say they plan on buying an AI powered device or virtual personal assistant, but this is close to 50 percent in some East Asian countries<sup>xviii</sup>.

## Future Skillset

The impact on skills will be profound, as will the associated shift to focus on skills as opposed to ‘role.’ Nearly 8 in 10 CIOs and business leaders across all industries suggest that within a decade, ‘...the skills and knowledge in their organisations will bear little resemblance to those they have today<sup>xix</sup>.’ The change could be so profound that some even portend the death of advertising, as the IoT and A.I allow for ‘...the perfection of data (that

will, eventually, give rise to a world in which every consumer can be paired up with goods that meet his or her tendencies.

To what extent this scenario unfolds will depend on many factors, yet there is little doubt that marketers, and the organisations they inhabit, find themselves at a crossroads. New data architectures are needed that centralizes consumer data to achieve the much vaunted 'single view' of the individual customer, while marketing reps will increasingly need to act on the insight derived from this data. Contextual personalization is the holy grail of insurance marketing<sup>xxi</sup>. Given the real-time nature of much incoming data, and the relatively small windows available to interdict, marketers must not only be adept at working with A.I, but capable of extracting value at short notice. For this to happen, organizational processes and even structures must change: silos must have a strong degree of connectivity with regards to data and culture<sup>xxii</sup>.

Marketing as a whole remains behind the curve with regards to digital skills, let alone intelligent ones. Nine in 10 marketers agree that there is a digital skills gap within marketing teams<sup>xxiii</sup>. Other aspects should not be neglected however, with 43 percent of North American marketers admitting difficulty with user design.

The range of demands emerging for marketing reps and managers is reflected in the belief of 70 percent of them in the importance of the ability to change<sup>xxiv</sup>. This is perhaps even harder to 'teach,' than even soft skills, suggesting either new talent pipelines to source the appropriate skills or else new learning methods will be required. With regards to soft skills, marketers also note the need to develop the following in the future: being able to think (identified by 67 percent), being able to work with others (66 percent) and lateral thinking (58 percent).

Such skills will, in the right configuration and amply supported by strong data and tech infrastructures, be able to bring about personalized marketing. Such personalization in insurance marketing is at best embryonic, yet other industries have seen the practice '...cut acquisition costs by as much as 50 percent, stimulate growth in revenues and

customer satisfaction by 5 to 10 percent, and increase marketing returns by a factor of between five and ten<sup>xxv</sup>.' Since a majority of Americans - 61 percent - say they'll share more data with a company in return for more customized communications<sup>xxvi</sup>, insurers able to scale such initiatives could benefit significantly.

Whether or not the era of free data comes to an end will also have repercussions for marketers and how insurers access data. The possible consequences of this have already been outlined by the World Economic Forum, which has 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<sup>xxvii</sup>.' This previously fringe view is gaining currency; a senior Microsoft researcher has also proposed that '...by 2027 a significant proportion of personal income is likely to be derived from the data people generate<sup>xxviii</sup>.' The implications for the marketing paradigm newly adjusted to digital, and aiming in many cases for better personalisation, could be profound in the mid to long term. Value generated in exchange for (free) data will likely need to be tangible and immediate if people are to acquiesce. Ultimately though, the nature of the marketing conversation changes, with consumers increasingly in control of their interaction with brands<sup>xxix</sup>.

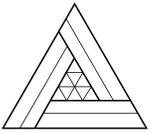
New skill areas are likely to emerge from the need to develop new avenues of engagement. While currently sought after skillsets relating to social, digital, A.I and data will still hold relevance, and perhaps still form the core of the 2025 skillset, a key skill predicted to see the biggest increase in importance is neuromarketing. Considered important by just 8 percent of marketers now, it is thought by 52 percent to become a key skill, or adjunct, by 2025<sup>xxx</sup>. By providing '...greater insight into consumer behaviour than consumers themselves are capable of giving,' neuromarketing could help maximise the potential for personalized marketing and help provide deeper insight than data alone can.

The ways in which marketing begins to adapt to the intelligent era will be key in determining the extent to which marketing can help define its functions.

By helping to centralize data across touch points (and even silo's), organizing data to better reflect the way CMOs think and gleaning details from customers' journeys<sup>xxxii</sup>, marketers could help shape the way data works for the insurance organisation. Indeed, the chance for marketing reps to influence the wider insurance industry and help inculcate a marketing philosophy is broad since in the digital and imminent intelligent era, we are all marketers now<sup>xxxiii</sup>.

## Key Questions For The Future

- Do we have a tech radar? Successful marketers will need to envision how AI, the IoT and other technologies impacts both consumers and the marketing paradigm.
- Are we ready to shift our time and workflows? Marketing skills and competencies are clearly changing but may not become completely technical or data focussed. A.I infusion will likely augment decision making and free up executives' time
- Are we ready to acquire new design skills that will be required for voice search or other forms of zero UI?
- How consumer-centric are we? IoT technology will give marketers a new perspective into the needs and desires of their clients when their products and services matter most.
- Do we have the leadership and soft skills to oversee change? An IoT deployment will link many functions and fiefdoms within an insurance organization – do we speak 'their' language(s).
- Can our data strategy remain, or become, a competitive advantage? For CMOs, ubiquitous data is likely to emerge as a key part in building trust and new consumer propositions – in terms of how data is (mis)used, how it enables better lives for individual consumers and the degree of control that consumers retain over it.
- What happens to our role in a world mediated by algorithms on both our side and the consumers?
- Are we ready to explore new roles? Marketing could morph into a trusted advisor type position, offering personalized insight and recommendations in exchange for data access.



# Future Claims Function

*The future of insurance and the wider environment*

Given insurers hitherto sporadic or episodic interaction with consumers, the ‘moments of truth,’ where contact is made have been of considerable importance. While ambient technology and IoT penetration will augment these moments and create new ones, it will remain that receiving help in case of an incident and submitting claims will endure as a critical moment of truth.

The claims process is at the centre of many an insurers’ digital transformation efforts, having been historically ‘...complex, cumbersome, often very time consuming and iterative process<sup>ii</sup>,’ for the consumer. From the perspective of the insurer, the claims function has largely been seen as a cost centre. Oliver Wyman notes that ‘...claims expenses and indemnity spend are a major factor for the overall financial success of the company as a whole. In the European insurance markets, for example, the annualized growth of total benefits-and-claims spend is more than 4 percent, translating to more than €350 billion per year, a number that is sure to rise<sup>iii</sup>.’

As a result of rising consumer expectations, largely set in unrelated industries through digital experiences and technological advancements, insurers are now on the brink of a new era in claims management. Many, although at varying speeds, are on the journey towards making every consumer touchpoint within the claims procedure a mixture of human and technological intervention that helps accelerate the process<sup>iv</sup>. These touchpoints can increasingly occur before an incident has even taken place. There can be no doubt that insurers are aware of the need to evolve the claims function, nor is the economic rationale questionable. With even fairly prosaic digitization, insurers can reduce loss-adjustment expenses by more than 20 percent, while concurrently improving customer satisfaction scores by a similar if not higher number<sup>v</sup>.

## Challenges to the current role

More advanced technology could make greater

inroads. Automation, for example, has the potential to reduce claims processing costs by as much as 30 percent<sup>vi</sup>, with labour forming a portion of these savings. Indeed, the insurance industry itself forecasts that it could lose one in five current jobs to automation within the next 5 years<sup>vii</sup>.

Some have even claimed that the claims function could all but disappear as ‘...edge architecture allows insurers to help customers avoid making an insurance claim at all<sup>viii</sup>.’ Others have suggested that by 2030, there will likely be 70 to 90 percent fewer human claims personnel than in 2018<sup>ix</sup>. Real time IoT sensors together with predictive analytics, for example, could help shift business models from compensatory to preventative in nature, with Cognizant forecasting the insurance model changing from 80 percent of revenue from claims to preventing business disruption or individual loss<sup>x</sup>. On the back-end, McKinsey estimates that some 60 percent of future volume – largely routine claims and simple customer interactions – could be handled by a cognitive agent<sup>xi</sup>. Others, such as SAP, have suggested the overall volume able to be handled with minimal human input could reach 70<sup>xii</sup> percent of all claims.

If realized this would have the simultaneous impact of shrinking the labour involved in the claims function, but significantly upskilling the core that remains. Strip out the routine, repetitive and easy solutions and what is left is a small knot of complex claims requiring nuanced judgement, superior customer service skills, empathy and fluency in technology used both by the consumer (i.e. IoT devices) and within the insurance claims process itself.

Regardless of the specific and unique balance between automation and the human touch, there is a central need to develop more consumer-centric options. 48 percent of insurers have or plan to build a customer-centric hub<sup>xiii</sup>. Once we place the consumer at the centre of the claims process, insurers then need to ensure they move at the

speed of the customer. Inherently, this means the way we will buy, build and use technology changes rapidly, which means the insurance teams and ecosystems that build it and run it will need to change too.

In some areas, insurers are pioneering tech use. For example, claims adjusters' workflows have already shown the potential to be made significantly more efficient, by some 40 to 50 percent, by employing drones<sup>xiv</sup>, with further gains relating to fraud prevention and storm damage still to be realized. PwC sees drone technology as capable of having a further \$6.8 billion impact on the insurance industry<sup>xv</sup>.

However, the challenge impacting the claims function and insurers more generally, is not dealing with one or two technologies, but rather a wide range of technologies at the same time, all of which are impacting and influencing each other. The platform economy and artificial intelligence have allowed China's Ant Insurance to allow customers to complete a claim in one second, down from 49 hours just two years ago<sup>xvi</sup>. Another Chinese insurer Ping An, uses cloud technology to connect its core claim management platforms, an AI based risk management system and its customer databases. This arrangement allows their AI system to handle close to 95 percent of small claims and as a result, in the first half of 2017 claims losses declined by 7.8 percent, or roughly \$480 million<sup>xvii</sup>.

Several western incumbents are also experimenting in this area. Zurich, for example, has piloted a chatbot called Zara to speed up claims<sup>xviii</sup>. Consumer preferences for convenience and boosting insurer profits and far from mutually exclusive; with claims they can often be one and the same.

## The future role

The future role for claims function professionals will depend in no small way on the direction respective insurers go with regards to the customer journey. A reimagining of the journey is likely, not least because of consumer dissatisfaction exemplified by over 60 percent of consumers indicating a willingness to switch providers<sup>xix</sup>. An outside in perspective is critical here, which is sometimes an alien concept

for a typically product and process driven industry. Key questions that will help define the future role, include

- How do customers want to experience a claims process?
- How does the insurer's value proposition map to those expectations?
- Do insurers want to increase cost effectiveness, settle claims fast, or provide the smoothest, simplest, and most customer-centric process<sup>xx</sup>?

Expense ratios are likely to decrease as successful digital transformations see new technologies introduced across the front and back-ends, helping replace legacy IT systems and boosting efficiency. As a result, executives will need to decide whether to reinvest some of this saving or else aim for the leanest claims operation possible.

It has been suggested by McKinsey that insurers wishing to reimagine the claims customer journey start by committing 20 percent of claims organisation resources to claim prevention, instead of traditional claims handling<sup>xxi</sup>. Building a position in the emerging claims ecosystem that enables access to data from a host of connected IoT devices – from smart homes, connected cars, wearables and beyond – will be a critical step and one that is not without potential issues regarding data use, security and infrastructure.

With an appropriate data architecture and governance, not to mention analytics, carriers could thus rapidly speed appraisals, damage assessments as well as shift the model towards prevention over compensation. It is also likely that while overall claims function job numbers will fall in both relative and absolute terms, automation will likely create new roles within the function too. These could include a customer concierge type role that crosses many of the current boundaries. A revolution in claims tech could also help realize '...new product development such as parametric driven insurance for climate change, and the provision of loss prevention services<sup>xxii</sup>.'

Despite the probability of fewer people working in

the claims function, or perhaps because of it, the focus on transforming corporate culture should be sharpened. By 2030 demographic shifts impacting both customers and employees will see Millennials and Gen Z constitute nearly half of the U.S adult population<sup>xxi,ii</sup>. Developing attractive propositions for these cohorts, not to mention leveraging technologies strategically and building a wider sense of purpose will require buy-in from the very top. Ultimately, the more engaged, satisfied and productive front-line claims workers are, the better the outcome for the individual consumer requiring assistance, and the insurer overall<sup>xxiv</sup>.

## Future Skillset

A digitally enabled workplace environment is a must, but a careful examination of what skills will, and will no longer be needed by the future claims workforce is necessary.

First Notice of Loss related processes are extremely likely to be increasingly automated by 2030, and as established earlier in the paper, most routine claims and their payments will likely require little or no human intervention. Such systems could conceivably in-build enhanced fraud checks and thus expedite direct payments to claimants or third parties' accounts.

Ultimately, 81 percent of insurance CEOs are concerned about the availability of digital skills in the industry as a whole, and up to 86 percent are concerned specifically about their own workforce<sup>xxv</sup>. The claims function is no different in its needs., with data underpinning almost everything.

Claims functions will see a rising demand for data and tech professionals. A mix of professionals will be needed to address the use (and prevent the misuse) of predictive and prescriptive analytics, machine learning and the IoT. Other areas, from drone use, cybersecurity and digital identity security will generate new forms of claims functions tasks and expertise. Another distinct skillset will revolve around climate change, the possible mitigation of some of its' impacts, and responding to weather related events.

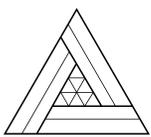
With the skills, previous work experience and role of those working in claims set to broaden and deepen, insurers on the job training propositions and even leadership pipelines need to evolve too. Digital twin technologies that represent an interactive replica of a physical asset, together with virtual reality and augmented reality are likely to feature in training and the workplace itself. The capacity to work with such technologies will need to be developed promptly by insurers wishing to avoid falling behind their clients; 13 percent of organisations implementing IoT projects already use digital twins, for example, while another 62 percent are either in the process of establishing digital twins or planning to do so<sup>xxvi</sup>.

Customer experience and data analytics are becoming as vital to the claims function, if not more so, than many of the traditional technical and control roles. Identifying the insurers' given role in the emerging ecosystem, its available bandwidth for digital transformation and then mapping out what skills will be necessary where they can be sourced from, and how they fit into existing (or new) structures will be key in determining the direction of the future claims function.

## Key questions for the future

- Applications of A.I and machine learning to data could result in new and unexpected forms of interconnectedness between insurers and institutions and consumers. Is our claims function ready to handle increased transparency?
- Network effects and scalability of new technologies may give rise to third-party dependencies and strategically important players and platforms. Are we ready to engage with external platforms or groups to achieve our goals?
- A.I could revolutionize insurance, making it almost omnipresent or 'invisible.' Are we ready to shift towards a more advisory 'always on' model?

- What happens to how we structure our claims function if we orient our insurance towards a more connected, preventative, outcome-driven environment<sup>xxvii</sup>?
- The industrial organization of the future, will likely be able negotiate on its customer's behalf, sharing data with the insurer to enable better risk management. How can claims use this data to improve processes?
- Adjunct revenue streams could open through consultancy services enabled through combined IoT and blockchain data. Do we have the talent to craft new propositions and use the raft of technologies on the horizon?
- How do we provide training for our current employees, when the skillsets needed could change decisively?
- Where do we source new talent from? Does our working environment and culture lend itself to digital talent? Or would a looser form of partnership suit us better?



## Changing Risk Managers

*The future of insurance and the wider environment*

Never has business as usual been less of an option for insurers than it is now, with change now guaranteed through a combination of strategic drivers. Shifting consumer behavior, disruptive technology and new competitors allied with low interest rates, emerging regulatory boundaries and rising capital requirements, point to change from a multitude of drivers of change. Some of these drivers are simple enough to understand, but the challenge posed by new competitors, for example, is by no means easily defined. Rather than a single wave of digital change, the development of start-ups and insurtechs is ensuring change is ‘...happening slowly in 1,000 small ways.’ A similar proliferation is underway in the number of risk vectors.

Since technology and how people use it is a key driver for risk managers, change needs to be an ongoing process. Increasingly, the Internet of Things (IoT), artificial intelligence, machine learning and big data analytics will all give insurers the ability to more accurately assess risk, manage it on a continuous basis, and even mitigate risk in real-time.<sup>iii</sup>

The ability to access and analyze this core data will be available to more than just incumbent insurers. This shift has an important impact on the end user, whether individual or corporation. Hitherto, organizations have aimed ‘...to mitigate their risk exposures on an individual basis with reliance placed on historical loss models to assess risk.’<sup>iv</sup> The inherent problem with this approach is the assumption of a single view of risk, with dependencies and correlations often unexplored. These interdependencies between risk exposures, and even within them, can be parsed using new sources of data, analytics and machine learning. This multidimensional approach to understanding risk, including the cost of insurance, is empowering companies and will force risk managers to extend their offerings or else deliver radical transparency.

### Challenges to the current role

Two key drivers of technological change are the IoT and artificial intelligence. As the number of IoT connected devices increases, our understanding of risk interdependencies will increase, and risk management shift from reactionary to real-time.<sup>v</sup> This will require insurers to embrace a digital mindset; those fail to do so, says Cognizant, ‘...risk

missing out on the \$1.6 trillion of value that the new generation of digital is set to create in the next three years.<sup>vi</sup> Predictions of the value created by the Industrial IoT (IIoT) range as high as a \$15 trillion boost to global GDP by 2030, with the industries potentially capturing the most value from this being insurance (26 percent), ahead of manufacturing (20 percent), and banking and securities (14 percent).<sup>vii</sup> That insurance could profit more from the IIoT than manufacturing may seem surprising, yet the reward for building successful cyber-risk solutions to meet the spread of new liability concerns at organizational and personal levels will be immense.<sup>viii</sup> The reverse is true too; those that move into IoT based cyber risk without the necessary expertise, partnerships or appropriate strategy could well find it a hundred-billion dollar liability.

Cyberinsurance may be a potentially lucrative area, with global cyberinsurance premiums potentially reaching \$20 billion by 2025<sup>ix</sup>, up from around \$3-4 billion now, but this remains only one of a range of ways in which technology is reshaping risk management and its processes. Data analytics, machine learning and IoT are driving a shift in the way insurers approach risk and have the potential to redraw change the business model definitively.<sup>x</sup> For example, companies can implement various A.I technologies to better interrogate their own claim trends and develop a more granular approach in determining exactly what interventions will lead to better outcomes.

Not all technologies will necessarily benefit incumbent insurance and risk managers. With the huge rise in data volumes, more widespread analytical talent and machine learning, there is also a risk of disintermediation of data set ownership as other ecosystem players access data that enables them to understand risk dynamics and pricing. For example, BMW is now fitting telematics as standard in certain car models to offer drivers insurance premiums based on their usage.<sup>xi</sup> This is, for now, in conjunction with an insurer, but questions remain as to whether this will remain indefinitely.

To avoid future disintermediation, risk managers and insurers more generally will need to improve the scope and ambition of their technological capabilities, especially relating to the IoT. As

new IoT-based service and business models emerge that present new avenues for insurers to investigate ‘...insurers could partner with companies to provide improved or new cross-industry products and services that harness IoT technologies and new ecosystems.<sup>xii</sup>’ Seen through this lens, digital networking through the IoT could become a strategic lever for insurers – elevating the technology far above that of an enabler of operational efficiency. In turn this will instill a further degree of complexity into risk management, further strengthening the case for machine learning use.

## The Future Role

In a broader sense, the changes to companies’ business models will also have an impact on that organization’s given operational risk management. While machine learning and other forms of artificial intelligence are already in use to help streamline processes and workflows, opportunities to improve risk management from a strategic perspective are increasingly possible. These technologies could uncover insights that inform a wider range of perspectives that drive an organization’s tactical, operational, and strategic decisions - thus ‘... improving the organization’s overall operational risk profile.<sup>xiii</sup>’ With an operating insight into how current risks are managed and eye to how future ones could be mitigated, risk managers have an immense opportunity to help guide or else own the process of helping identifying and defining future risks. As it stands, the top three most underestimated business risks, according to a Raconteur survey of global experts are; ‘Cyberincidents,’ as identified by 54 percent of respondents, ‘Business interruption,’ at 36 percent, and ‘New technologies,’ at 25 percent.<sup>xiv</sup>

To this end, risk managers should attempt to map out where and how A.I will create risks and provide opportunities not just for companies, but for how the risk function works.<sup>xv</sup> The most difficult task for companies is to define the time at which these challenges and opportunities present themselves – history is littered with good ideas that came too soon as well as good ideas that were too late to the table to make any meaningful difference. Risk managers with a good understanding of both commerce and technology could develop ancillary

streams around such understanding. Organizations may consider themselves generally aware of some of the risks inherent in emerging technologies, but they often admit to a lack of capabilities needed to track, manage and mitigate them. This presents a significant challenge for risk managers, but on the flip side, an opportunity to demonstrate their aptitude in these areas.

It is forecast that 24 percent of the overall personal insurance market could be disrupted due to the changing nature of risk and better data<sup>xvi</sup>. Better data is the operative word in this sentence. More data doesn't necessarily equate to better data. 80 percent of insurance executives reported that their '...organizations increasingly use data to drive critical and automated decision-making at scale.' However, some 97 percent of business decisions are made using data that the company's own managers consider to be of unacceptable quality<sup>xvii</sup>. Without a rigorous method of data verification and cleaning, in other words prosaic data hygiene, it is unlikely that the benefits of better data will occur automatically. It is likely that structural, procedural, technological and cultural changes are all necessary within most insurers if this is to be realized.

For one, collaboration between brokers, insurers and risk managers, could make a significant difference for assessing risk. For that, trust is critical, as is a degree of data transparency and sharing that is arguably absent at present<sup>xviii</sup>.

## Future skillset

It is certain that new skills will be needed at an individual level, if technological change is to enhance the efficiency and effectiveness of risk functions. So far, this lack of appropriate talent has hampered what are otherwise forceful attempts by some insurers to bring their risk function into the intelligent era.

This strongly reinforces the need for risk managers to develop digital fluency<sup>xix</sup> and learn from their peer networks across the organization and beyond. A technologically savvy risk workforce is no longer optional; in-fact it may become the bare minimum

for future insurers. The balance between in-house training and imports from other sectors will obviously differ from organization to organization. Yet it is worth remembering that a tech-savvy risk function ready for the intelligent era will likely require a cultural shift that allows practitioners to see technology as an opportunity and accept the necessary change and experimentation that it demands. In some instances this may make the acquisition of new talent unencumbered by legacy cultural norms a pressing priority.

As with many jobs within the insurance ecosystem, future risk managers will likely need to develop their soft, or professional, skills further to include better communication and cross function collaboration. Among colleagues, many risk managers suggest an inadequate understanding of the risk function and an aversion to risk management thinking. Together with an adjustment of processes and KPIs, better interpersonal skills could help spread the ethos of the risk manager and ultimately help build a stronger risk culture within the wider workforce. In a wider sense, only 35 percent of boards and directors are highly involved in risk management<sup>xx</sup>, which suggests the chance to turn risk management into a strategic driver has perhaps never been higher.

The risk manager of 2025 could expand their remit beyond their conventional spheres of compliance and governance to help better inform '...innovation attempts and strategic business planning<sup>xxi</sup>.' To this end, a greater appreciation of other roles within the insurance organization could also yield potential benefits for risk managers. An understanding of the actuarial process, for example, could help risk practitioners gain additional insights into a company's risk profile that ultimately benefit the company's bottom line and the utility of the risk manager<sup>xxii</sup>.

Risk managers, and insurance executives more generally, need to develop their skillsets strategically. Requirements for risk managers will in part depend on the role(s) the insurer wishes to play within the emerging ecosystem. Skillsets for various future scenarios need to be mapped, gaps in current practices identified and a plan for how to provision on the job training developed. This is not restricted to the staff within the Risk function,

but this function should be considered as a priority given the potential for critical disintermediation from insurtech startups<sup>xxiii</sup>.

There is a danger when predicting future skillsets and requirements as thinking of digital transformation as a one off. The evolution of risk management will continue beyond the digital phase. It is plausible that by 2025, with machine learning the bedrock of any thriving incumbent, that structures could ‘...free up risk management capacity for full-time consultants, enabling them to provide impactful service and risk assessment in the true middle market that still requires boots on the ground<sup>xxiv</sup>.’

## Key Questions For The Future

- Are we ready to embrace ‘...new technologies to improve how the Risk function operates, while responding to the implications for talent management and resourcing<sup>xxv</sup>?’
- Am I confident that there are minimal data quality or management risks in our current, practices and any proposed future ones?
- Do I have the high quality, large-scale data necessary for advanced analytics and machine learning to aid my job?
- For all the opportunities inherent in data, data also exposes insurers to new risks – how do we measure these?
- How can we expand our offerings to companies undergoing structural transformation?
- Does democratized data impact our standing? If every company has access to the same data we do, what is our offering?
- Am I able to explain any algorithms we use to a customer if asked, and would they perceive them to be just?
- How do we build the talent pipeline for tomorrow? Does it look the same as today’s or do we need to tap into new skillsets to meet the evolving risk management role?
- How can we respond to changing market needs in an agile way, and thus create long-term value?

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