



Insurtech 10: Trends for 2019



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Foreword

The insurance industry is on the brink of a major revolution as adoption of insurtech enters a new phase.

Data is the driving force for these innovations, as it remains tantalizingly close, but not yet in the full control of many businesses.

There are no quick fixes that allow insurers to clean up their data. Insurtech is the means to transform insurance from an arcane policy-led industry into one that succeeds by placing the customer at the heart of everything it does.

New ways of doing business

In the coming year there will be an increase in the level of implementation of new and innovative approaches to transform the way insurance companies do business.

This is not about digitizing the legacy business, but about demonstrating to the whole organization that there is a different way of working that doesn't only present risk, but brings positive energy, new opportunities and rewarding outcomes.

This means moving beyond tinkering with components of the value chain that has epitomized some early flirtations with insurtech and seeking to implement solutions that will transform the whole business.

Moving beyond the comfort zone

Businesses are asking their people to build a new customer-centric architecture, design propositions and products, and launch them with new governance and controls that connect into the core functional systems of HR, finance, etc.

This will require a totally new approach and result in the development of a digital greenfield, which could allow them to move beyond the current structures and culture to achieve their objectives.

It may not be totally necessary to go 'off grid' in order to develop the solutions insurers need. Decoupling from existing governance structures can be uncomfortable, but organizations must push for this in order to break down the cultural obstacles that are holding them back.

Transformation requires leadership

Executives must embrace this change — and rapidly — if they are to benefit from the opportunities and not get left behind as the industry is transformed.

Most of the failures that have come from IT projects arise from trying to integrate and navigate through legacy structures and systems. Insurers must think in terms of running a two-speed business that preserves the qualities of the old, while placing their talent, focus and digital energy towards the new model, which will become the engine of their transformed business.

This requires leadership to recognize it is not just about changing technology, but also about shifting the business model.

It is expected to become the new business as usual, but this requires many of the old skills to navigate the data and security controls that must be in place to build products and platforms that operate in a new global marketplace.

Working in partnership

More partnership between insurers and insurtech companies are likely to develop over the coming years. However, an area for concern — and which may explain the tentative moves made by some players — is in the area of business integration.

Not in terms of middleware — there is an abundance of functional technology available in the marketplace — but in the areas of advisory, engineering or architecture. This has been the missing link, and for insurtech to succeed, both innovators and insurers will need to work with business integration specialists in a three-way partnership.

There is a clear need for insurers to bridge that gap between having a great idea and turning it into a brilliant business model. We know that plugging in technology isn't going to make it happen all on its own; it must be part of a program to reengineer the whole organization into a fully connected digital business.

I am excited to share the collective views and predictions of the KPMG network of insurtech professionals and The Digital Insurer specialists for 2019 in the next few pages. Our plan is to revisit this next year to see how we fared against what we thought was going to happen and what actually happened. I really believe this is more of a discussion document, and as such, I would welcome your views on each of the predictions.



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Contents

Executive summary	4
Trend 1	6
Digitize or die — how insurers must adopt business process transformation and become agents of change	
Trend 2	10
Ecosystems rock — and will be coming sooner than you think	
Trend 3	12
It's a new game — press the reset button	
Trend 4	16
Digital risk reduction	
Trend 5	18
Focus on the digital customer	
Trend 6	22
Data is the new oil — and the price is going up	
Trend 7	24
Master AI and machine learning now	
Trend 8	26
Auto insurance — disruption is coming but direction is not clear	
Trend 9	28
New role for the oldest skills	
Trend 10	30
Skill up and reorganize urgently for a digital world	
Conclusion	32
About KPMG	34
Contributors	34

Executive summary

This joint research paper by the KPMG network of insurtech professionals and The Digital Insurer examines the macro trends that are influencing the adoption and implementation of insurtech in the insurance market as a whole.

It is intended for insurance professionals, particularly heads of strategy, digital transformation heads and business line leaders, as well as those at technology companies involved in the insurance industry.

Highlights of the research

The research is a distillation of the experiences across multiple regions and sectors of a number of key senior partners at KPMG member firms and specialists at The Digital Insurer.

It highlights a number of key themes.

-  The need for insurers to engage with a program of digital transformation.
-  Without these innovations, insurers will likely become increasingly marginalized as they fail to gather the required data to transform their businesses.
-  That insurtech ecosystems will likely become the driving force of writing insurance business but may see considerable regulatory influence exerted in the next few years.
-  AI and machine learning are already supporting transformation and are expected to greatly enhance the digital 'face' of interactions with customers.
-  The future of insurance is expected to lie in the adoption of insurtech, but that legacy remains an ongoing issue.
-  The revolution in auto is a microcosm of the wider insurance market.
-  How data and analytics is reducing risk for policyholders and insurers.
-  Insurtech is an essential part of the transformation process, but so are the traditional skills of underwriting and actuarial, though they may have a different application in the future.
-  Insurance must focus on a digital first approach placing the customer at the center of all processes.
-  Recruitment and retention of staff remains crucial to success, as a connected enterprise still needs good people.
-  However, customers will not likely be segmented, to the same extent, along the old categories of age, sex and nationality, but behavior, the very thing driving the data.
-  The extent of changes in regulatory oversight are as yet unknown, but regulators have started to pay closer attention to digital transformation and how these changes might affect consumer protection and the supervisory relationship.

Insurtech predictions for the coming year

From this research, we expect the following current and emerging trends within insurtech to shape the changing face of insurance companies across the world over the next 1 to 2 years.

-  **1** Customer satisfaction and retention will be a more important key performance indicator (KPI) than operational efficiency. Incumbent insurers must fundamentally change their business models, and this requires cultural change and a focus away from product to the customer, their experience and outcomes.
-  **2** Mature insurance markets may see the new highly automated insurance platforms such as those developed in China as a direct challenge and seek to compete with them. The successful incumbents will likely be the ones who learn from them, adapting and adopting their tech where appropriate.
-  **3** Claims settlement are expected to become one of the most important elements of customer engagement. Speedy settlement creates a rewarding experience for customers.
-  **4** Health ecosystems are essential for the future success of those operating in the life sector. Wearables are increasingly contributing to this market, and without access to these datasets, insurers will not be able to manage risks or engage with their customers.
-  **5** Business as usual must break the models of the past. There is a need for cultural change and alignment with the specific markets insurers service, providing risk capital on different terms to a market that comprises large numbers of small risks. Insurtech allows this type of business to be profitable.
-  **6** Data is the lifeblood of the new order. Any lack of data can create gaps and cause integration and process flow issues, so it needs to be assessed as an end-to-end process. Insurers that lack data, or the partners and models that generate it, can expect to find their business models severely challenged.
-  **7** AI and machine learning is a transversal tech with applications across the value chain and may prove to be the biggest driver of efficiency.
-  **8** The move in auto coverage from insuring individuals to the vehicle will continue. It may even split, with individuals holding a general third-party liability coverage and the vehicle 'holding' its own coverage against damage. Automakers are likely to see the possibility in developing their own ecosystems to package insurance into their interaction with their client. Driverless vehicles continue to be developed and further disruption may be caused by new entrants that are not traditionally associated with the transport market.
-  **9** Big data will likely undermine the role of certain types of underwriting, though it should remain essential in specialist areas, such as shipping, key employee risk management, etc. However, the skills of underwriters and actuaries can be redeployed offering greater understanding of the vast amount of data that a digital insurer will generate.
-  **10** Good companies need good people. Recruiting and retaining employees is expected to become more important as engaged and happy employees create a 'vibe' that translates into happier customers. In insurance, a happy customer is usually a loyal customer.

Some of these developments may be seen in certain parts of the global insurance market, but we believe that the next phase of digital transformation will be focused in these areas.

Trend 1

Digitize or die — how insurers must adopt business process transformation and become agents of change

The global insurance industry — like every other strand of commerce and government agency — is feverishly focused on leveraging the benefits of a digital environment. The development and adoption of insurtech has a clearly defined progression. The first of these two phases began with a focus on digital distribution and data, the second was heavily focused on sales and marketing.

In the first phase, the underlying insurance product remained more or less the same, but some parts went digital. The second has seen the emergence of risk carriers that are changing the underlying insurance product and using insurtech to automate the value chain.

This second phase has seen considerable advances in new sources of data and the ways in which data is processed.

Clear and present danger

Those carriers that show the greatest innovations also pose considerable threat to traditional insurers' models. This is not only because they are doing things never previously conceived, but because they have the technology working now and incumbents have yet to build — or adopt others' — technology platforms.

That may not pose an immediate problem, but insurers must start preparation now if they are not to see their businesses damaged by 'early adopters'.

Adoption is not a simple case of bolting on a few peripheral systems. Or be seen as a chance to refresh the business in a piecemeal fashion by simply moving traditional business online. It offers the opportunity — and requires — total transformation of the existing business model.

How they handle this repositioning of the business strategy will likely determine whether they are considered a tinkerer or

transformer and indicate how sustainable their business will have become.

Market commentators suggest the industry will have been transformed in as few as 3 or 4 years and no longer than a decade.¹ This means insurers must have a digitally focused and automated digital-first/customer-first business that would be comparable to the tech giants of today.

Building the future on partnership

Some incumbents have been investing in insurtech already with mixed results. They have accepted they cannot easily build tech themselves and may increasingly view insurtech companies as partners rather than competitors.

Most of the tech to be deployed in the next phase is expected to be on value chain innovation, to reduce cost, improve efficiencies and generate ecosystems that will support future insurtech developments.

This will represent a complete 180-degree shift in focus from processes to placing the customer at the heart of everything insurers seek to achieve. Focusing on the customer allows insurers to develop a service that is considerably better than the existing model.

Products can launch quicker, meet customer needs better, capitalize on a broad range of existing data and build on practical experience. These foster services and products that are relevant, and operate on a high-speed, customer-centric front-end.

¹ 2018 ADVANTAGEGO INSURTECH SURVEY. (2018, May 21). Retrieved January 03, 2019, from <https://www.advantagego.com/assets/8475f700fb/2018-AdvantageGo-InsurTech-Survey.pdf>

Where to start?

There will be a major trend to API or microservices architecture in order to work around the transactional legacy systems, but also allow interconnectivity with many other systems.

At all times, the customer must be at the center of the process design, and robotic process automation (RPA) will increasingly be deployed to offer better customer interaction and data harvesting.

Building a platform business requires state-of-the-art technology and very fast and flexible time to market. This is not achievable on legacy systems alone. Insurers will have to invest in customer-facing digital platforms, intelligent automation to streamline processes, and develop smart contracts for claims and predictive underwriting.

How to start?

The first step is to define a process, determine the problems that need to be solved and decide what opportunities can be harnessed. Then they must ask what can be eliminated, what can be automated, what can be outsourced, and avoid insurtech that offers proof of concept in favor of proof of potential return on investment. This process requires engagement from the board level down, or it will fail.

Though barriers to entry remain high in terms of cost and regulatory oversight, platform providers will be disruptors in mature markets.

The Chinese market has opened up, but technology is required by any new entrant seeking to compete with BAT (Baidu, Alibaba and Tencent).

It may be too little, too late for some market players, but only time will tell.



Outlook

Incumbent insurers must fundamentally change their business models, moving from siloed operations to fully connected enterprises. This requires a cultural change, to focus away from product and to organize themselves entirely around the customer, their experience and outcomes.

Customer satisfaction and retention will likely be a more important key performance indicator (KPI) than operational efficiency.



Players in this space

Atidot — predictive analytics platform using artificial intelligence, machine learning and big data to provide insurers greater insight into their data.

Cover Genius — product XCover allows carriers to transport products across borders by undertaking the product customization across 20 languages and more than 70 countries.

eBaoTech — works with more than 100 carriers, agents and ecosystem players in more than 30 countries developing connected insurance models.

Flamingo — uses AI to improve customer experiences to improve efficiency and drive growth.

Pega — US-based company that develops software for customer relationship management, digital process automation, and business process management.

Zhong An — founded in 2013, it is China's online-only insurance company. Since inception, it has acquired 460 million users and written more than 5.8 billion policies.



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Trend 2

Ecosystems rock — and will be coming sooner than you think

The preeminent position held by Chinese insurtech pioneers is undeniable. Unhindered by legacy systems and processes and unburdened by the regulatory structures of more developed markets, companies like Zhong An and Ping An have been the poster boys of insurtech. Being first to market was not the secret of their success. It was founded on sound technology, nimble business practices, and one key component that has revolutionized the insurance business in China — micropayments.



BIO SYSTEM

Customer-centricity

Devising a customer-centric model involves making it easy — even enjoyable — for customers to do business. Taking payment for digital services has, to date, been the most painful part of the exercise and can put people off completing a transaction.

Biometric security has made micropayments simple for millions of consumers across the world via their mobile phones or wearable tech and now insurance must fall into step. After all, simple, painless payments can make for repeat business.

The quicker and easier a transaction becomes, the happier — and more loyal — a customer becomes. It is simple human nature to be satisfied with those who do not make life difficult.

Micropayments

Developing sound micropayment systems will help to unlock sections of the developing markets that have low current levels of insurance penetration. Zhong An has shown that efficient management of millions of tiny payments can develop new markets when the old manual systems simply could not operate profitably.

Systems using mobile telephony have had some success in parts of Africa, but there is a lack of standardization and the technology is relatively expensive. Millicom's Tigo is one platform that has had success in Africa (and is now focused on Latin America) in developing a sales platform whose payments are managed by the telco.²

Though the expansion of USSD (unstructured supplementary service data) — a GSM technology that provides an interface between a mobile phone and an application — offers some hope, the ecosystems developed by the Chinese disruptors are far more advanced.

More than just taking the money

While quick and easy payment is an important factor, the ecosystem that builds up around a platform will likely be what keeps customers there. Just as retail focuses on the experience rather than simply selling units, so insurance must follow.

These ecosystems can offer customers a one-stop shop to conduct business and simplicity of payment is just one crucial component to building effective ecosystems.

They will be one-stop online platforms, where customers not only buy insurance, but interact with social media.

China has developed a model of payments + social + mobile + data. An example is Tencent with its combination of payment, social media and contextual messaging in a single app (WeChat). This platform generates 38 billion messages every

day, producing a rich source of data to feedback into insurers' analytics engines.³

However, many jurisdictions may see greater engagement from their regulators. These agencies need to understand how the transformed businesses will be different and what this means for governance and consumer protection.

Brexit may have very specific consequences for regulations in the UK market, but there are other forces at work that need to be considered. The General Data Protection Regulations (GDPR) were implemented across the EU in 2018 and have made some considerable changes to responsibility around data. The debate has already begun in Washington about the possible introduction of similar consumer protection regulation into the US market in 2019.⁴

Regulatory oversight always comes at a cost and requires careful management. It is another reminder to insurers that it is time to get serious about transforming into a digital business.



Outlook

China is the market to watch for digital insurers, demonstrating action in technology at a massive scale. They have built highly automated insurance platforms and have taken a non-traditional approach to fundamental insurance processes such as underwriting, pricing and claims handling.

Mature insurance markets may see this as a threat and prepare to compete with these innovators/disruptors; the smart money — and the successful incumbents — will be the ones who learn from their experience and partner when it is apparent they cannot out-develop their technology.



Players in this space

Ant Financial — an affiliate of Alibaba, it is China's highest value fintech company, operating Alipay, the world's largest mobile and online payments platform; Yu'e Bao, the world's largest money-market fund; and Sesame Credit a third-party credit rating system. It has developed facial recognition payment technology through its Alipay service.

Ping An — the world's largest and most valuable insurer, worth US\$217 billion as of January 2018.

Tencent — Chinese conglomerate, the world's largest gaming and social media company.

Zhong An — founded in 2013, it is China's online-only insurance company. Since inception, it has acquired 460 million users and written more than 5.8 billion policies.

² Devtel, E. (2018, February 16). BIMA Mobile Insurance and Health. Retrieved from <https://www.developingtelecoms.com/tech/devices-platforms/7592-bima-mobile-insurance-and-health.html>

³ Wei, H. (2017, November 10). WeChat users send 38 billion messages daily. Retrieved from http://www.chinadaily.com.cn/china/2017-11/10/content_34372396.html

⁴ Meyer, D. (2018, November 29). In the Wake of GDPR, Will the U.S. Embrace Data Privacy? Retrieved from <http://fortune.com/2018/11/29/federal-data-privacy-law/>

Trend 3

It's a new game — press the reset button



The revolution that is coming to the insurance world is in part based on technology. But there is an increasing focus on the development of middleware solutions to reduce dependence upon legacy systems and improve access to data. These expected to be aimed at driving growth, internal efficiencies and the internal view of how a company works. In addition — an important element of the change — is the focus on improving the customer experience.

Another important component of this revolution is for insurers to shift their focus away from manufacturing, marketing and selling of products to keeping the customer satisfied. This requires the industry to abandon the legacy mind-set of hundreds of years of culture.

Both are going to be difficult to achieve and doing the two at the same time will likely cause a degree of angst and identity crisis.

Looking for help

Outsourcing to third parties is a sensible way to overcome legacy constraints and to bypass internal gaps in capability. Partnering itself also creates opportunities — opens the corporate mind — to cultural change and new ways of thinking.

Adopting new ways of working might include deployment of an agile start-up methodology that is continuous without monolithic milestones and accessing relevant expertise about customers, business, products, analytics and IT.

Implementing a new approach to product development with a high frequency of testing prevents an organization from becoming overly attached to a project that isn't working and for which success seems unlikely or excessively costly.

In with the new, but not necessarily out with the old...

Implementing these systems requires work. Insurtechs' systems are not fully aligned to the value chain — they weren't developed to be dedicated to one insurer — and require aggregation and integration.

This cannot be achieved without reference to legacy and core systems; they remain essential — for now. Though some businesses may decide to draw a line under their old ways of business and sell off back books, others may persevere until such time as any legacy systems must be overhauled or allowed to die.

For runoff business, legacy will always be part of the value chain and insurers must overcome the inflexibility of legacy when acting on a platform or in an ecosystem.

But even new systems will, in time, become legacy and the motivation to move away from legacy already exists. Old systems have less resistance to cyberattack once a hacker is inside. Data breaches are fast becoming the largest reputational and regulatory headache for corporates.

Underlying infrastructure providers enables insurers to move off legacy technology and launch new products to market quickly, and there has already been something of a shift towards cloud-based services for insurers.

It's getting better all the time

Process improvements are expected to focus on underwriting, sales and claims, and customer engagement in the spaces between the points of transaction. This is where the data will likely be acquired that allows the automation of bespoke and on-demand coverage, improving access and reducing complexity, and thereby reducing the cost of writing such business.

These new systems have the ability to segment customers largely on their behavior — how they interact with the insurer and influence the risk within their policy — rather than traditional categories of age, sex, location, ethnicity, etc.

There is a need to integrate multiple solutions and partners. APIs and microservices are essential components in this process, as existing technology stacks simply don't cut it.

Blockchain has become something of a buzzword, but it isn't a future innovation, as it is already deployed in some flight delay and lost baggage claims systems, and offers a bright future for highly complex risks such as shipping.



Outlook

One of the most important elements of customer engagement is likely to be claims settlement. Removing the manual claims process can satisfy consumers and create repeat business. This is not about the size of claims, but the speed of the settlement, creating an experience that customers may prefer and appreciate.

Legacy systems have a role to play as a system of record, but incumbents will increasingly find that the functionality they require already exists on the platforms that are launching and that their legacy systems will become redundant at an accelerated pace.



Player in this space

Element — insurtech company helping insurance companies build digital services.

FinLeap — fintech company building technology companies for the banking, insurance and asset management industries.

Instanda — cloud-based platform for building and releasing insurance products.

Kasko — API-powered agile insurance product and distribution platform operating between digital customer touchpoints and legacy IT systems.

Lemonade — property and casualty insurer that returns a portion of premium in a no-claim period.

RightIndem — digital self-service claims platforms.

Slice — insurance cloud services platform that offers on-demand home share, cyber and rideshare insurance.

Socotra — innovative insurance platform.

TravelerBuddy — fully integrated travel app.

Trōv — on-demand insurance platform for electronic products.

360Globalnet — online risk and claims settlement platform.



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Trend 4

Digital risk reduction

The adoption of wearable tech — smart technology that monitors physical activity via apps linked to mobile technology — is beginning its own revolution within healthcare.

Insurers are keen to acquire data that can help them assess, and therefore mitigate, risks. They are now partnering with customers by getting them to exchange data for premium discounts. In the US, John Hancock policies have gone one stage further by requiring fitness tracking data to be submitted.⁵ This lends credibility to wearables data as a valid new source for risk assessment, rather than simply a distribution loyalty gimmick.

A brighter, healthier future

Access to doctors is problematic in stretched national health services. This has resulted in insurtech being implemented into the rapidly growing telemedicine market.

In the US, many states are changing laws to allow telemedicine to be developed.⁶ In Europe, remote consultation with a doctor is common in France and is growing in the UK. Though not currently permitted in Germany, it is only a matter of time before insurtech is adopted there too.⁷

The benefit of insurtech in healthcare is apparent. The data gathered allows carriers to mitigate and reduce risk while influencing mutually positive behavior in the customer. The customer will likely be healthier and perhaps even live longer, while the insurer builds a more complete dataset.

Early intervention can prevent the development of chronic health conditions and can provide considerable savings in claims. Better data can build better products and can also be used to remove friction points that deter consumers from buying insurance, such as a lengthy series of medical consultations before a policy is agreed upon.

Access to better quality healthcare data offers the possibility of a future where secure patient records can be shared in order to settle claims simply and easily, as is beginning to happen with flight delays and lost baggage.

This would require a move to fully digitized patient records, and though Estonia is leading the charge with all health records stored in blockchain, that will have to remain aspirational for some time.⁸

A healthier insurance market

A natural affinity exists between life coverage and healthcare. Higher quality healthcare and prevention of major illness can extend life, which is good for life insurers' business.

Health is currently engaged in an arms race with insurtech to offer a digital service that will allow companies to prevent, manage and eliminate risk.

Insurers need to add on services to engage with customers and give them what it is they want. However, if they succeed, they will have developed new sources of growth as health is one of the few natural ecosystems insurers have. It is essential they invest outside core competencies and take risks on new business models.



Outlook

Life insurers who fail to secure a place within a health ecosystem within the next few years will likely find their business models challenged. Without access to the kinds of datasets being acquired today, insurers may not be able to manage risks or engage with their customers.

As wearables continue to be adopted by insurers and customers, there is expected to be an increased use of genomic and epigenetic technology to determine a customer's biological age above their chronological one.

This will likely radically alter the way that life policies are priced and provides a more accurate way of assessing factors such as smoking and drinking on an individual's longevity.



Players in this space

Babylon/Prudential — AI-powered digital health services.

Discovery Vitality — Insurer that rewards policyholders based on lifestyle and driving behaviors.

Good Doctor — Ping An's telemedicine product.

Medopad — developing algorithms to improve diagnosis and risk assessment.

Muang Thai — developed BaoWan product to monitor diabetes and reward condition management.

Wellthy Therapeutics — AI-powered digital therapeutics.

⁵ BBC News. (2018, September 20). John Hancock adds fitness tracking to all policies. Retrieved from <https://www.bbc.com/news/technology-45590293>

⁶ Gurren, Stephanie, and Joseph L Fink. "States Continue to Expand Availability of Telehealth." Pharmacy Times, 29 Sept. 2018. www.pharmacytimes.com/publications/issue/2018/september2018/states-continue-to-expand-availability-of-telehealth

⁷ Foa, E. (2018, September 03). Will 2018 be the year in which telemedicine takes off in France? Retrieved from <https://www.parishealthcareweek.com/en/blog/will-2018-be-the-year-in-which-telemedicine-takes-off-in-france/>

⁸ Einaste, Taavi. "Blockchain and Healthcare: the Estonian Experience." Nortal, 6 Dec. 2018. www.nortal.com/blog/blockchain-healthcare-estonia/

Trend 5

Focus on the digital customer



The modern consumer is never off their phone — and that is just how retailers like it.

E-commerce has moved from being a novelty to an everyday function of most people's lives and that is equally applicable to financial and protection services. However, insurance companies have been slow to realize the shift in behavior and how far they are from having meaningful engagement with their customers any time other than at time of renewal.

Digital first every time

Insurers have to bridge this gap, but it is getting harder, as it is the customer who controls access.

Today's customers don't even need to decide whether to answer a call by asking the operating system to filter out contacts at certain times or from particular sources.

The process of placing the customer at the center of an insurer's processes offers insights into what customers want, what they need, how they want to consume these products and how they like to be engaged.

Though they like the immediacy of digital transactions, few customers will tolerate the incessant call center feedback loops that seem designed to meet service level agreements about call handling rather than meet customer expectations about service standards.

Do not call lists, combined with the rise of chat, means people are resistant to calls from people they do not know, making digital content marketing essential.

Artificial intelligence (AI) and machine learning is being used to add to the efficiency of digital technology but with a human face — or voice, in some cases. These systems are using language that is engaging with customers and improving satisfaction by using a common vernacular and keeping processes simple.

On the same wavelength

This will likely be crucial as the developing markets in Asia, the Indian sub-continent and Africa grow — with a world population of 10 billion by 2055 according to United Nations' estimates.⁹

Not only are there many languages new to the insurance sector, but society is very different from the mature, development markets. More than 60 percent of citizens operate in the informal sector, with considerable pressure on their income. Products that offer break periods or the ability to postpone payment without the policy being cancelled might be features that would prove appealing to such a population.

⁹ "World Population Projected to Reach 9.8 Billion in 2050, and 11.2 Billion in 2100 — Says UN — United Nations Sustainable Development." United Nations, United Nations, 21 June 2017, www.un.org/sustainabledevelopment/blog/2017/06/world-population-projected-to-reach-9-8-billion-in-2050-and-11-2-billion-in-2100-says-un/

Engagement is problematic

However, access is equally difficult. Many potential customers are remote and the old methods of contacting and marketing to customers no longer work.

Growth in rural and developing markets will likely be dependent upon a number of factors including financial education and the ability to deal using USSD (unstructured supplementary service data) over GSM mobile networks.

Micropayments are well established in African markets,¹⁰ but insurance penetration is possibly below 1 percent.¹¹ Low cost, high transaction volume business supported by AI and RPA could open these markets rapidly.

Behavioral economics don't work in these markets as there is no discretionary spend. Though there is an opportunity to build profiles from phone use and payment data, they simply do not operate the same as mature markets.

The biggest obstacle insurers face is in fact trust, which is a totally different dynamic in emerging markets that have no experience of dealing with financial institutions.



Outlook

If the insurance industry takes a western or mature market approach to launching digital businesses in the emerging markets, they will likely fail. A different approach is required that provides risk capital on different terms to a market that comprises large numbers of small risks. To date, such business has been unattractive and costly to insurers, but insurtech can enable high levels of automation.

The need for cultural change and alignment with the specific markets they service is essential. However, peer-to-peer insurance is one model that has a significant chance of succeeding in a way that has not been possible in the mature, western markets.



Player in this space

Gefen Technologies — software as a service platform that allows agents to reach, engage and connect with customers.

MicroEnsure — microinsurance for emerging market customers.

M-Pesa Kenya — mobile phone-based payment system.

Pineapple — items insured through mobile phone images.

Ping An — the world's largest and most valuable insurer, worth US\$217 billion as of January 2018.

Tencent — Chinese conglomerate, the world's largest gaming and social media company.

Tigo — mobile phone-based financial services platforms.

Zhong An — founded in 2013, it is China's online-only insurance company. Since inception, it has acquired 460 million users and written more than 5.8 billion policies.

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¹⁰ Flood, Zoe. "Zimbabwe and Kenya Lead the Way in Africa's Dash from Cash." The Guardian, Guardian News and Media, 22 Feb. 2018, www.theguardian.com/world/2018/feb/22/kenya-leads-way-mobile-money-africa-shifts-towards-cash-free-living

¹¹ Aglionby, John. "Africa's Insurance Market a 'Giant Waking up'." Financial Times, Financial Times, 28 June 2016, www.ft.com/content/bc87016a-2430-11e6-9d4d-c11776a5124d

Trend 6

Data is the new oil — and the price is going up

Insurtech is having a transformative impact upon the global insurance market — the role of data is absolutely central to the entire project. Data is not simply the facilitator for better underwriting and keener pricing, but is the very DNA of the 21st-century connected organization.

Data is expected to power connectivity with customers, generate insights into customer behavior, driving risk pricing and customer engagement. Insurers that do not have control of data will likely be in trouble and are likely to get left behind.

On their best behavior

The data required is quite different from in the past. It used to be that personal data — ‘the who, what and where’ of customer relations — was the most important. It demonstrated who owned the client, but that is a model already in decline.

Big data is essential in order to manage RPA and artificial intelligence (AI), but it is only useful if it is associated with behavioral data — the why and when. However, consumers are in the driving seat when it comes to digital engagement, as they control the access.

Access poses certain challenges for the insurance market to overcome. Though people freely share vast amounts of data and even their whereabouts with social media platforms, they are often reticent to disclose data to an insurer. There is a general mistrust of governments and large corporates misusing data against the interests of its customers.

Consumers may have good reason not to trust all organizations — data breaches and ‘fake news’ have exposed inherent weaknesses or governance gaps.

A question of trust

Although there is strong growth in the adoption of wearable tech that is influencing the healthcare sector, consumers are generally split on the issue of sharing personal and behavioral data. Insurers must tackle the ethical questions that arise about how they will use this data if they want to avoid a potential backlash now — or in the future — against big data from the consumer prompted or reinforced by regulators.

This is particularly important as insurers generally lack the skills to process and interpret this type of data efficiently

and are likely to engage external expertise to support faster deployment. This will require engagement and partnership between the insurer and the customer so that customers understand that in giving up their data they receive a tangible benefit. Today, that may manifest as a reduction in premium or discounted gym membership, but could lead to more sophisticated profit sharing rewards for efficiency savings in the future.

Trust is expected to be the foundation of the fledgling industries in the rapidly developing economies, where there is no existing culture of purchasing insurance.



Outlook

Insurers need data for the insights that analytics can provide them to assess risk from the individual up to macro trends. But, like oil, it is getting hard to extract, particularly if you are using inappropriate or suboptimal processes.

Any lack of data can create gaps and cause integration and process flow issues, so it needs to be assessed as an end-to-end process.

It is unlikely there will be a convergence of standards. Different business models reflecting different approaches will likely proliferate, countries with fewer restrictions such as China as likely contenders to lead innovation in the industry.



Players in this space

Apple Healthcare — digital products for managing chronic illness, medication and medical research.

TrackActive — digital health product to support practitioners in treating patients.

Trend 7

Master AI and machine learning now



The next phase of insurtech deployment as outlined in the first chapter (see page 7) is expected to be focused on improving efficiencies in insurers' core functions. Opportunities present themselves in many areas and each requires skills to be harnessed in-house, but they also rely upon strong partnerships with third parties.

One of those key areas is in the application — and mastery — of artificial intelligence (AI) and machine learning.

The rise of the machines

AI has a wide range of uses that can greatly simplify onboarding and customer service, in particular the claims settlement experience. Though the experience to date of claims estimation for auto damage has been mixed, it is an example of how, in the future, a claim will likely be simpler and cheaper to process and therefore settled more quickly, to the benefit of both insurer and customer.

AI is expected to revolutionize more specialized functions such as fraud prevention, anti-money laundering through to underwriting and pricing.

The human touch in a digital glove

As mentioned previously, customer engagement is important, but AI will extend far beyond marketing.

Mental health is a major cause of lost productivity, because it can take months for an employee to be diagnosed and to start treatment. The sooner this process begins, the better, but typically, once an employee is absent due to mental health matters, all contact is lost, making future contact very hard to initiate.

Platforms are already being developed to bridge the pastoral and clinical environments to assist those with mental health — or musculoskeletal problems — to stay in touch with the employer through a virtual consultant or counsellor. This will maintain contact and keep channels of communication open, helping them back into the workplace more quickly. It will also offer ongoing support to keep them there with monitoring and through support networks.



Outlook

AI generates data, and insurtechs and insurers that lack data, or the partners and models that generate it, will find their business models severely challenged.

AI and machine learning is a transversal tech with applications across the value chain and it may prove to be the biggest driver of efficiency.



Players in this space

Carpe Data — gathers and refines a range of emerging and alternative data sources enhancing all facets of the insurance life cycle.

Lemonade — property and casualty insurer that returns a portion of premium in a no-claim period.

Policybazaar — online insurance market aggregator.

Shift Technology — AI-based anti-claims fraud.

Trend 8

Auto insurance — disruption is coming but direction is not clear

Aside from health and life coverage, there can be few areas more appropriate for insurtech to assert a benevolent — and mutually beneficial — influence on the behavior of policyholders than in the area of auto coverage.

Telematics offers much more than access to coverage for high-risk groups above and below a certain age. It can reward all policyholders with lower premiums if they are prepared to reduce risk by adjusting their behavior behind the wheel.

Mature markets may face a difficult future, such as Australia and possibly the UK, where the telematics saturation point has been reached even without it being mandatory. More sophisticated insurtech platforms are in development that expected to adjust the risk — and the premium — as the insured is driving, indicating who the carrier is in real time according to driving risk and location.

Changing role of ownership and mobility

As these systems are developed, telematics will likely have an increasing role to play within underwriting and pricing. The nature of insurance is changing across the globe, as individuals tend to lease or rent cars and are offered a whole of life service. This expected to include auto coverage automatically as manufacturers operate like a distribution platform.

Mobility as a service (MAAS), where a car use is consumed as a service, is growing in many metropolitan areas. Insurers may finally understand that the route to a profitable auto business is not in the race to the bottom, but likely in developing the auto insurance ecosystem of the future that starts at the car's dashboard.

This is another potential inflection point for insurers to deal with. Without an easy access engagement point with the consumer (the dashboard), automakers may be able to take control of the value chain. In time, insurers may have to be content to feed into the new ecosystem in which automakers and their distribution channels represent the sales platform.

Who carries the coverage?

Automated vehicles have somewhat dominated telematics in the debate concerning the future of auto insurance. There is good reason, as the development of driverless vehicles is being undertaken by companies that do not have a transport market pedigree, like Alphabet's Waymo, but see the opportunities of providing MAAS.

This raises an interesting philosophical question as to who the insured should be in the event of an accident — the owner, the operator or the vehicle itself?

As autonomous vehicles enter the market, coverage may shift from the individual to corporates seeking liability coverage, or individual policies for each individual vehicle.

Those companies that do not engage in telematics may find they have no value in the emerging ecosystems as the data generated provides insights for risk reduction and assistance in the event of claims.

The ecosystem is set to develop rapidly, and car manufacturers, if not yet in the driver's seat, are holding the keys.



Outlook

We see a major shift in auto coverage, moving away from insuring individuals to insuring the vehicle itself.

The alternative is that auto insurance will likely split, with individuals holding a general third-party liability coverage and the vehicle 'holding' its own coverage against damage.



Players in this space

Amodo — platform employing usage and behavioral data that helps insurers build direct digital channels and new products.

Bambi Dynamic — Tel Aviv-based platform develops and distributes on-demand and usage-based insurance solutions.

blOTAsphere — ecosystem developer.

Carrot — rewards-based telematics insurer.

Coverbox — restriction-free telematics-based auto insurer.

Octo Telematics — risk management telematics provider for insurance companies.

Trend 9

New role for the oldest skills



The functions of actuarial and underwriting within insurance companies are fundamentally changing as a result of the transformation occurring alongside the adoption of insurtech.

Insurers require big data, but while data aggregation results in the law of large numbers and predictive analytics can reduce the need for underwriting in certain generic cases, these roles are expected to remain central to the digital organization.

One is one and all alone

Underwriting of risk is what the insurance industry does and is very good at it. However, access to big data offers greater insights than ever into the specific behavior of customers and therefore their overall risk. This can give insurers the ability to better segment their customer base to provide more personalized products based on the levels of granularity available in the data.

New role for statistical wizards

Underwriters and actuaries will likely have a new role in which their specific data science skills can be applied. Rather than being replaced by black boxes, they will likely lead the charge in reassessing and enhancing the statistical approach to traditional underwriting, armed with a treasury of data.

Beyond this revitalization of statistical analysis, certain specialized lines and heavily manuscripted endorsements, such as shipping, will likely still require the old methods to be applied as there will likely not be sufficient data to underwrite on the press of a button.



Outlook

While insurtech may have the effect of reducing actuaries in certain general areas of commercial insurance, there should always be a place for techies with slide rules and log books to do the really hard and bespoke risk calculations.



Players in this space

Laetus — image-based underwriting solution.

Shift Technology — AI-based anti-claims fraud.

Verisk — analytics solution for energy and risk underwriting.

Trend 10

Skill up and reorganize urgently for a digital world

The insurance market is in desperate need of new ways of working, which are starting to be delivered by insurtech innovations. However, insurers moving to digital, connected enterprises need more than a systems overhaul if they are to leverage the technological revolution.

In addition to a cultural shift, leaving behind the old mind-set, insurance needs new blood to fulfill the new roles that will be generated by this transformation.

A problem of perception

Hiring and retaining employees is difficult and expensive at the best of times and many potential candidates — particularly younger candidates — struggle to see themselves in such a stuffy old industry.

Attracting digital talent into insurance is even more challenging because insurance isn't perceived as 'cool' and, with shortages of experience in most areas, they are in demand in dynamic new tech start-ups or established disruptors like Google, Apple, etc.

However, insurtech partnerships can provide rich opportunities for carriers to attract and retain emerging talent that is missing from insurance. Traditional insurance is often seen as a sleepy backwater of the financial industry, but the new, connected organization that insurance companies are so desperately trying to become is dynamic and can transform the way people interact with these businesses in the future.

Wider benefits of insurtech

So much of the project to become a digital first business is about focusing on the client experience, to offer the customer more than what they felt they got from the old model. Insurers must also record how customers interact with that old model in order to provide the products they want, when they want them.

This requires segmentation of customers according to their behavior — how they interact with the insurer or influence the risk within their policy — rather than traditional categories of age, sex, location, ethnicity, etc.

Insurers are also trying to educate and enhance the working experience of the employee in order to retain those with the skills for this new market. Some see this as important as the customer, because they believe that the customer is satisfied when employees are happy. It might be viewed as an element of business continuity, but driven by people rather than process. A happy employee that understands their role and feels in control will likely service customers better and is less likely to leave the company.

The internal customer

As serving the customer through insurtech becomes embedded in more businesses, the ways employees work will likely evolve as a result of them adopting online learning and development of new processes and systems. This allows staff to enrich their work experience for the benefit of all at a time and place of their choosing.

Employees who enrich their experience in the workplace feel more fulfilled and in old-fashioned terms they are happier.¹² Happy staff give customers a better experience, so there is a good business case for insurers not only to attract the right employees, but also seek to become an employer of choice as it may impact the bottom line.



Outlook

Insurance needs new high high-caliber and once it has managed to attract them, it needs to retain them.

There is a business benefit to keeping employees happy, because it is unlikely customers will be happy if the employees aren't.

Keeping customers happy with happy employees is just another form of business continuity. Reversing the process offers insurers insights that they can use to satisfy their internal customer — their employees.

¹² Dodson, P. C. (2015, July 31). Why Happy Employees Are 12% More Productive. Retrieved from <https://www.fastcompany.com/3048751/happy-employees-are-12-more-productive-at-work>



Conclusion

The paper highlights 10 key trends shaping the insurance industry and predict how these may develop over the coming year.

Insurers will develop their capabilities at different speeds. They may not tackle them all at once and some may not be as relevant to their core business in certain lines of business.

However, they are universal objectives, necessary to transform insurance companies into the kinds of digital entities that can not only survive, but be sustainable in the rapidly developing market.

Data is the Holy Grail

More efficient administration is only part of the aim. Data harvesting lies at the heart of innovation in insurance. Better data pools provide greater insights into customers' behavior and requirements, but also help to reduce risk for the insurer.

This does more than reduce costs for the insurance industry. It gives it a more powerful and flexible business model with which to service the needs of digital customers.

And the industry must target digital customers. Interaction with clients has been isolated to policy anniversaries and renewal periods, and fails to build on existing relationships. This makes it easy for an insurer to be cut out of the loop if another carrier offers the same — or more appealing — products and experience than them.

Customers are expected to be increasingly segmented upon their behavior, as this is the data that insurers are beginning to capture. Traditional categories of age, sex, location, ethnicity, etc., are meaningless in this new world where data is so important to the success of an insurance business.

Technology to transform the business model

This requires root and branch overhaul of administrative systems and integration of AI and machine learning to increase automation, productivity and reduce error rates.

Ironically, AI can provide a more personalized experience for customers in a digital ecosystem than some of the existing quasi-digital systems with multilayer access portals supported by call centers.

In time, expect to see a more widespread move away from providing indemnity of risk towards risk prevention, with insurers providing services in addition to a financial safety net.

And though blockchain is already present within certain insurtech systems, it has not been focused on heavily in this report. It will, undoubtedly, be a useful tool and become an essential component to leverage further efficiencies as part of the future of insurtech. However, there is a lot of work that needs to be done at a more basic level — the cultural shift would be a large project without any technology dimension added to it. Therefore, it would be easy to overplay its role in the next couple of years.

Leadership must grasp the nettle

Transformation cannot happen without major cultural change, as it requires a new approach that few insurers have managed to achieve with technology builds in the past. There is a need to remove the new business away from the need to maintain any legacy. Every technology program revolves around legacy, and this is a cultural barrier that must be tackled first. It will likely take some incumbents time to get their collective heads around this approach.

It is no longer acceptable for insurers to tinker with components in the value chain to deliver efficiencies in one area that are not aligned with the objectives of the whole organization. It's all or nothing, because very few organizations that fail to adopt a digital first strategy will find their business model to be sustainable.

The frustrations that many have felt in dipping their toe into insurtech will most likely result in them seeking to dive in and ask their teams to think beyond current limitations caused by legacy in order to deliver a customer-centric architecture with its own governance and controls that link to legacy, but are not determined by it.

There will likely be a great deal more greenfield development of insurtech and this requires total commitment from the executive. Decoupling from a system of processes, some of which are rooted in centuries of experience, poses challenges. It may be uncomfortable to lead in this space, but if insurers are to retain control of their industry and not be relegated to a white label manufacturer, they must move their companies' cultures beyond the safety net.

Working together

As these predictions take root, there will likely be a greater need for business integration. The cynical may think: "Well, you would say that, wouldn't you?" But this is in fact a key area that neither the insurers nor the insurtech firms can satisfy.

Just as it is hard to throw off the decades of culture, so it is impossible to build business integration capabilities overnight. There has, to date, been too little consideration for the areas of advisory, engineering and architecture in the debate around insurtech.

Having a partner with a track record of achieving business integration is not only a good idea, but a business critical function. This will likely become more apparent as insurers fully understand the size of the change and stop viewing insurtechs as potential competitors and partner with them more closely.

Success lies in a three-way partnership with consultants identifying just how the other parties can work together most efficiently. The next stage of insurtech implementation is here and is expected to be bigger than ever before. But it won't take much to prevent it being better.

Get with the program

As outlined, insurtech is no longer going to be seen as a side project to improve efficiencies in an area of the business, but the raison d'être to the whole digital transformation program.

Insurers have hopefully realized that, with few exceptions, they will have to consider reengineering their whole organization if they wish to compete in the markets they currently occupy. The only way to achieve that is to transform themselves into a fully connected digital business.

About KPMG

In an ever-evolving digital landscape, insurers need to remain aware, critical and decisive in their insurtech strategies.

Shifting focus towards long-term customer loyalty, reducing operating inefficiencies and driving increased profits can only be done with effective development and implementation of new technology.

At KPMG firms we have a committed, experienced global insurtech network and strong relationships, who collaborate to help organizations across general, life and reinsurance cut through the complex technological landscape, helping them find the right solutions to address their most demanding strategic technological challenges.

The Digital Insurer

As the world's leading platform for insurance professionals, The Digital Insurer's purpose is "working together to accelerate the digital transformation of insurance". The digital changes underway represent an enormous opportunity to profitably grow the insurance industry to meet rising customer needs, and also a generational opportunity to address deep-rooted trust and satisfaction issues around the world.

With a community of more than 30,000 members and probably the most valuable knowledge base on digital insurance, TDI works closely with the evolving global industry to help participants take full advantage of these opportunities.

Join TDI to get involved at www.the-digital-insurer.com and look out for further member services as the platform continues to grow.

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