

INSURTECH-LED CHANGE IN THE LLOYD'S MARKET

A PRIMER AND STRATEGIC GUIDERAILS
FOR MANAGING AGENTS

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Our agile approach, senior teams and deep sector expertise allow us to deliver projects for clients faster than traditional consultancies.

In January 2018 we were ranked one of the top 10 management consultancies in the UK for insurance in a Financial Times study.

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Thanks

Oxbow Partners would like to thank all those who helped us with the research for this report including numerous market participants and the InsurTechs who we have included in this report for their considerable efforts providing information about their businesses.



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WELCOME FROM THE LLOYD'S MARKET ASSOCIATION

Over the last eighteen months, InsurTech has moved beyond being seen as a hostile entrant into the general insurance landscape and has become synonymous with innovation activity throughout the industry. Moreover, the impact of innovation is now being felt in the core business and by customers, and not only in limited experiments in segregated hubs and labs.

Within many Lloyd's managing agents there is growing evidence of collaborative innovation as insurers buy, borrow and build the capabilities required to compete in a changing landscape. We have seen the creation of innovation teams, appointments in areas such as artificial intelligence and blockchain and the creation of new roles such as Chief Data Officers, Digital Officers and Heads of Innovation.

But what does this all mean?

We believe that this activity is evidence that innovation through new technology and data is becoming the norm, but little has been written about the impact specifically on the specialty market. That is why the LMA asked Oxbow Partners to explain why and how InsurTech is now relevant for corporate & specialty insurers and reinsurers and to provide some strategic 'guidelines' to help managing agents develop their response.

We hope you find the report useful.

Tom Payne

Director of Market Operations LMA

About the Lloyd's Market Association (LMA)

The Lloyd's Market Association (LMA) represents the interests of the Lloyd's community, providing professional and technical support to our members. The purpose of the LMA is to represent our members' interests and needs, identify and resolve issues which are of particular interest to the Lloyd's market, and lead and influence the delivery and adoption of change via market initiatives. We work in partnership with the Corporation of Lloyd's and other market-related associations to ensure we have an engaged and collaborative approach across the London market.

The creation of this report was supported by InsTech London

InsTech London is a community of over 3,000 insurers, innovators, entrepreneurs, investors and professionals, from the market and over 50 corporate members. Its purpose is to promote innovation in insurance, showcase the best innovators and startups, facilitate cross-market collaboration and provide incumbents with a way to establish their own innovation relationships and credentials. We do this through monthly themed evening events, a weekly newsletter and by curating and providing thought leadership. It is run by three partners who are all leading InsurTech experts and is free to all startups.



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What is InsurTech?

We define InsurTech as both the new generation of fast-moving startups (the narrow definition of 'InsurTech') and the trend towards a higher velocity of technology-led innovation and change that they (amongst others) facilitate.

InsurTech companies themselves divide into two categories:

Distribution InsurTechs: These companies are trying to acquire customers through distribution and proposition innovation. They need (re)insurers as capacity providers.

Supplier InsurTechs: These companies are developing technology which could help insurers, reinsurers or brokers do business more effectively. They are vendors and require incumbents as customers.

EXECUTIVE SUMMARY

When InsurTech emerged as a term in 2016 – after a brief debate about whether ‘insurance technology’ was going to be abbreviated to InsTech or InsureTech – it was largely a personal lines phenomenon. Companies like Bought By Many in the UK and Lemonade in the US sprung to prominence and sought to ‘disrupt’ the consumer experience. Some spoke of an ‘Uber moment’ – the idea of a market being turned on its head by a transformational and aggressive technology-led entrant.

The Lloyd’s and London markets for the most part looked on with interest but limited concern.

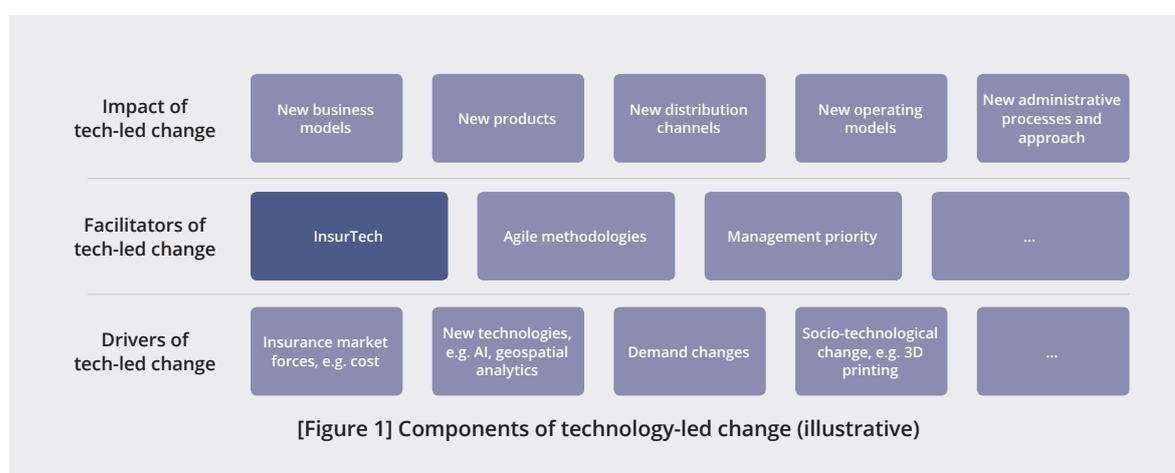
It remains tempting for executives to believe that the corporate and specialty markets have complexities that isolate them from material InsurTech-led change. But this is to belie the evidence.

London (re)insurers and managing agents have set up ‘labs’, and corporate insurers are creating new products such as Beazley’s ‘Breach Response’ cyber product which provides pre- and post-loss services as well as liability cover. Managing agents have set up ‘labs’ to build new solutions like XL Accelerate’s collaboration with Gatwick Airport and Oxbotica, a tech company, to develop autonomous airside vehicles.¹ In section 2.2 we discuss how the SME insurance value chain is being re-engineered and the impact this will have on the sale of specialty insurance products and delegated authority business generally.

One can argue about whether the driver of these developments is new – i.e. InsurTech – or a continuation of the established forces of market innovation. We think this discussion is a distraction. We define InsurTech as both the new generation of fast-moving startups (the narrow definition of ‘InsurTech’) and the trend towards a higher velocity of technology-led innovation and change that they (amongst others) facilitate; the ability to deliver new business models, products, distribution channels and so on.

In other words, we do not consider InsurTech as distinct from other trends in the industry and prefer to see it as one of several facilitators of technology-led change. [Figure 1]

In this report we argue that InsurTech has arrived in the commercial and speciality markets – Lloyd’s heartland – and technology-led change will accelerate over the next few years.



¹ <https://www.oxbotica.ai/autonomous-vehicles-shuttle-staff-gatwick-world-first/>

In section 1 of this report we discuss the drivers of change:

- ❑ **Insurance market forces:** The Lloyd's and London Market expense ratio of c.40%² is broadly acknowledged as being unsustainably high. There are multiple market-wide and company-specific technology (and non-technology) initiatives underway to address this.
- ❑ **New technologies:** Several technologies, for example artificial intelligence (AI) and natural language processing (NLP), have been made to work. 'Rocket fuel' can be poured onto implementation activities. Advanced analytics are changing the products that insurers can sell, driving growth for insurers and closing protection gaps for customers.
- ❑ **Demand changes:** Customers are becoming more 'digital', changing the products they want to buy and how they buy them.
- ❑ **Socio-technological changes:** Technology-led change is occurring outside the insurance industry and will accelerate; in this report we consider the impact of 3D printing on the industry as an example. Insurers will be forced to develop new solutions that respond to a changing outside world.

Will these forces create an 'Uber moment'? We believe that they could, but that there does not necessarily need to be an 'Uber moment' for material change to occur. Incumbents would also be challenged by a Supplier InsurTech (see box) building a proposition that extracts outsized 'rents' in certain niches or value chain segments but does not change the structure of the market in and of itself, a condition we require for the 'Uber moment'.³

The challenge for managing agents is to build solid hypotheses about how these drivers of technology-led change will play out and what responses are available to them. To do this, they need to have a detailed understanding not only of their own organisation but also of the actions of competitors, service providers and possible future competitors.

One hypothesis we put forward in this report is that once the value of InsurTech has been proven in a certain area of the business, even if narrow, future implementations could be rapid, both in that organisation and in 'fast follower' competitors. For example, it may take months to arrange the first proof of concept (POC) with a 'ClaimsTech' as the necessary approvals are obtained, but extending that POC to additional lines of business could be much quicker.⁴ Adoption trajectories could quickly become exponential, leaving laggards who have not drilled the foundations for tech-led change behind.

To assist managing agents in preparing for their future, this report describes five areas where there is already material change (section 2), summarises our view of how executive teams should respond (section 3) and profiles fifteen InsurTechs active in the areas we described (section 4). In keeping with our InsurTech Impact 25 report,⁵ we chose startup businesses that have progressed beyond ideas but are not household names. We excluded any business that is part of an established corporate entity. Our selection is intended to illustrate activity along the value chain; we emphasise that there are hundreds of other InsurTechs in the market and many advisors and organisations are happy to help corporates with 'scouting'. (See section 5 of this report for details of organisations who can help you further.)

In some ways, the Lloyd's market is advantaged in the InsurTech 'arms race'. Managing agents are generally nimbler operators than large insurance groups meaning that Supplier InsurTechs can be deployed quicker. At the same time, they can take 'Distribution InsurTechs' global using Lloyd's extensive licences and their own relatively simple international management structures.

However, it is true that technology is levelling the differences between players in the insurance value chain – managing agents, international insurance groups, reinsurers, alternative capital – and competition for customers will intensify. Managing agents should see this as their moment to make some big strategic bets, both individually and in consortia, and ensure that London remains the epicentre of insurance innovation.

To be a winner, managing agents need to make digital and data a Board-level agenda point to ensure that change is not derailed by biases or entrenched interests. They must find an enthusiastic but realistic executive to create a clear vision for a digital future based on both today's opportunities and likely future developments. They must create the environment to make real change quickly.

InsurTech-led change is not a tide that lifts all ships equally.

² Lloyd's Annual Report 2017 ³ We use 'Uber moment' to refer to the phenomenon of a tech-led company gaining a monopolistic or oligopolistic position in a market by delivering and aggressively growing a new customer proposition. To create an 'Uber moment' under our definition a company must change the way products are accessed and consumed in a market. ⁴ It should be added that incumbents currently have huge challenges scaling innovation; these challenges need to be resolved before this hypothesis becomes true. ⁵ See www.oxbowpartners.com/impact25-2018

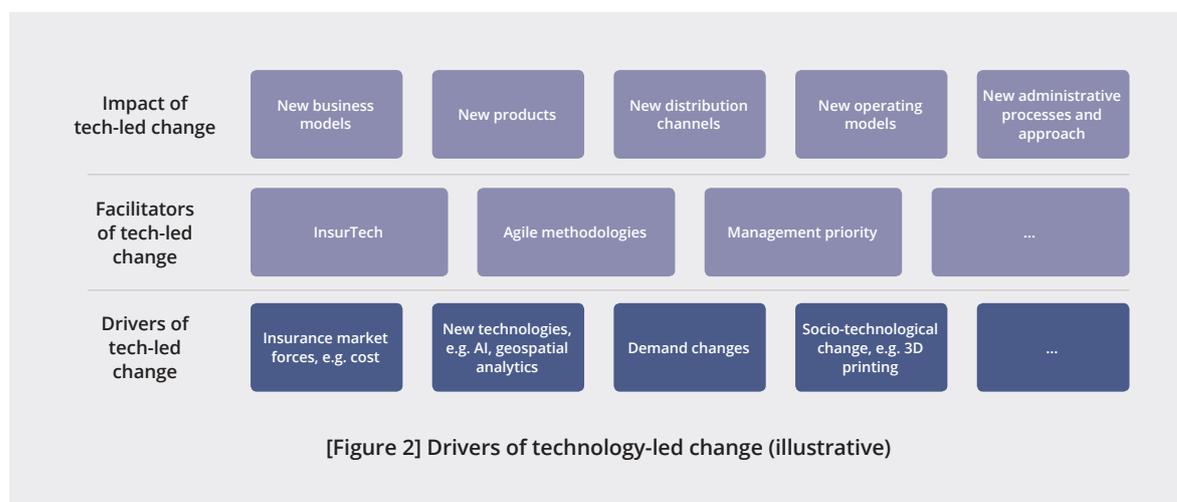
1. WHY INSURTECH SHOULD NOW BE A PRIORITY FOR MANAGING AGENTS

It is tempting – and for this audience convenient – for incumbents to believe that the Lloyd’s and London markets have complexities that isolate them from material InsurTech-led change. Brokers have long-established advisory relationships with their clients. Products are heterogenous and complex, making the market unattractive for digital distribution innovators. Corporate entrants (e.g. retailers) are likely to be deterred by the economic volatility of insurance products (few have set up as carriers in the past). Under almost any conceivable model, corporates just like Distribution InsurTechs require ‘permission’ for their proposition from incumbents who control the regulated balance sheet of last resort (e.g. reinsurers).

But this is to belie the evidence: in this section we describe how insurers have already launched innovative new propositions, notably in cyber but also in other areas, are developing new solutions in collaborations with tech companies and clients, and are setting up labs to push innovation both internally and externally.

In section 2.2 we discuss how the SME insurance value chain is being re-engineered and the impact this will have on the sale of specialty insurance products and delegated authority business generally.

We believe that 2018 is the year that InsurTech became a priority for the Lloyd’s and London market. In this section we lay out our thesis on the drivers of change. [Figure 2]



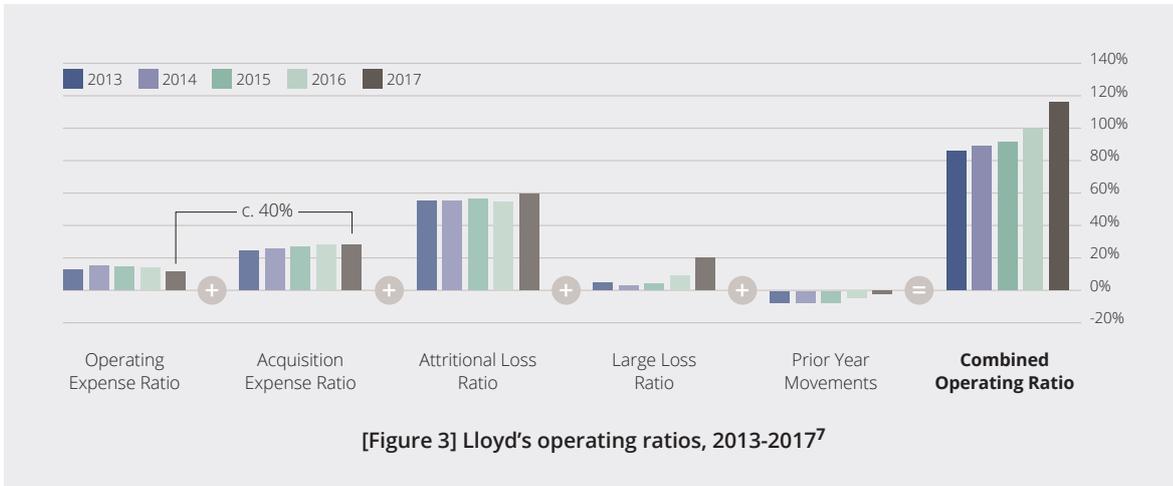
Insurance market forces

Lloyd’s and the London market’s focus on cost is well publicised. The market expense ratio of c.40%⁶ is broadly acknowledged as being unsustainably high. The flagship initiative to modernise the market is the London Market TOM project. Its objective is to make the market more accessible to its customers and provide more efficient and cost-effective services that better meet their needs. At the other end of the spectrum, more tactical initiatives have been launched such as the Single Claims Agreement Party model, which is designed to speed up payment of non-complex claims of up to £250k through a more efficient decision-making mechanism.

This focus creates an internal impetus for change arguably stronger than in previous cycles. [Figure 3]

However, it is important to remember that focusing on operational efficiency alone will not have a transformational impact on market results: the operational expense ratio amounts to a mere 12.5% of premiums. Instead, managing agents also need to focus on acquisition costs – 27% in 2017 and on a rising trend – and loss ratios (nearly 80%).

As a result, this report focuses on InsurTech trends that impact all three key operational ratios.

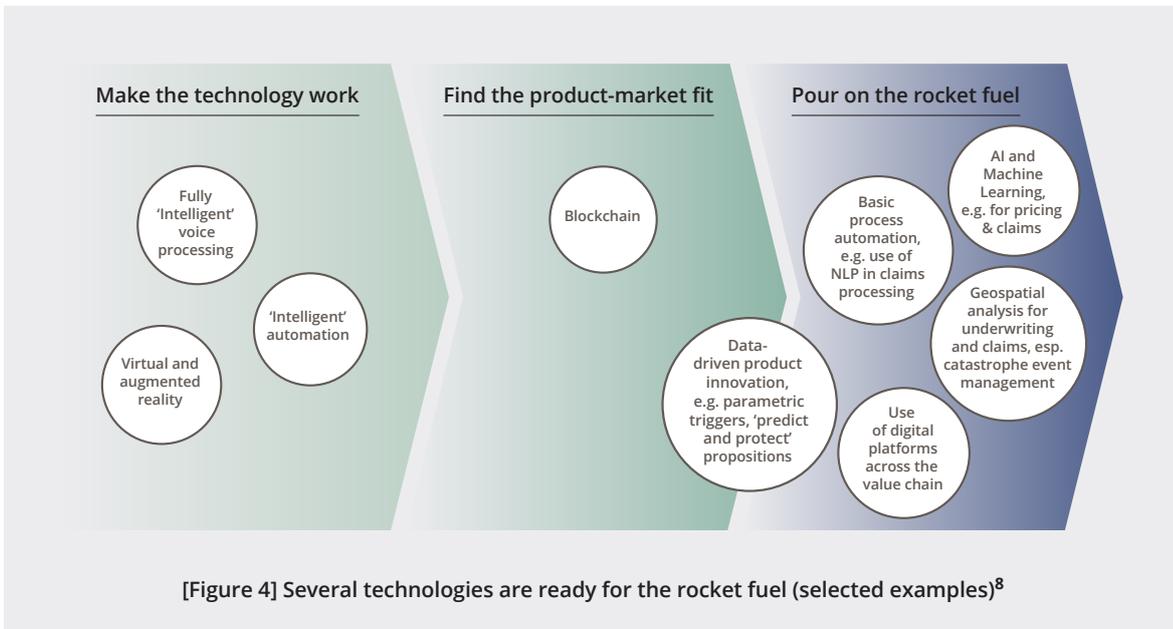


[Figure 3] Lloyd's operating ratios, 2013-2017⁷

New technologies

We are living in an age of rapid technological change. Life is unimaginable without a smart phone today – but consider that the iPhone was released only in 2007. There are new consumer-facing and back-end methodologies and technologies which are driving change in the insurance market.

These technologies and methodologies are at different stages of development – but critically some are ready for ‘rocket fuel’ to be poured onto implementation activities. Use cases have been identified and insurance leaders need to scale up implementation in the core business to avoid falling behind competitors. Advanced analytics (AI, machine learning) and natural language processing (NLP) are two examples that fall into this category. [Figure 4]



[Figure 4] Several technologies are ready for the rocket fuel (selected examples)⁸

⁶ Lloyd's Annual Report 2017 ⁷ Source: Lloyd's Annual Reports and Lloyd's

⁸ Source for framework: Benedict Evans presentation at Andreessen Horowitz's annual 'Tech Summit' 2017; adapted for insurance by Oxbow Partners/

Other technologies are not yet at this stage. Some are still being made to work by technologists, for example fully automated analysis of the content and meaning of voice. Further along the spectrum, innovators are exploring the 'product-market fit' of new technologies in insurance. Blockchain is a good example here – there is no doubt that distributed ledger technology works but there are still many questions about how it could add value at scale in insurance.⁹ Commercial Internet of Things (IoT) also works but insurers are still wondering where they sit in the data flows, what their proposition should be, and the optimal economic model.

Advanced analytics are changing the products insurers can sell. For example, Hiscox has launched a US flood insurance product which functions as an alternative to a government pool, the National Flood Insurance Programme. Whilst examples of new product innovations may sometimes seem limited in scope, they are all necessary steps to closing 'protection gaps' that exist even in the most developed economies. According to Munich Re's estimates, of the \$85bn economic loss caused by Hurricane Harvey in 2017, only \$25-30bn were insured.¹⁰

For managing agents this presents a huge opportunity to innovate into new risk pools. However, there are equally significant challenges of prioritisation and focus.

Demand changes

Customers are becoming more 'digital', changing the products they want to buy and how they buy them.

Managing agents are creating new products in the corporate market to address emerging risks, notably cyber insurance. Beazley's 'Breach Response' product provides pre- and post-loss services as well as liability cover. Maersk recently started to transfer its marine insurance portfolio onto a blockchain-enabled platform, which a consortium of incumbents including Willis Towers Watson, MS Amlin and XL Catlin is using to automate many parts of the value chain.

Many managing agents have set up 'labs' to accelerate the build of these new solutions for clients. XL Catlin's lab, XL Accelerate, is collaborating with Gatwick Airport and Oxbotica, a tech company, to develop autonomous vehicles for airports, helping their clients further reduce security risk in the industry.¹¹ Other managing agents such as Hiscox, Talbot and the Channel Syndicate have similar teams.

In section 2.2 of this report we look at possible disruption in SME insurance. We describe how two InsurTechs are responding to the increasing use by SMEs of cloud-based platforms for services such as accounting and HR and online marketplaces to source anything from pens to talent. These platforms could soon become the 'gatekeepers' to SMEs in the same way that social media has become the gatekeeper to consumers. Insurers must take action to ensure they become beneficiaries of these dislocations.

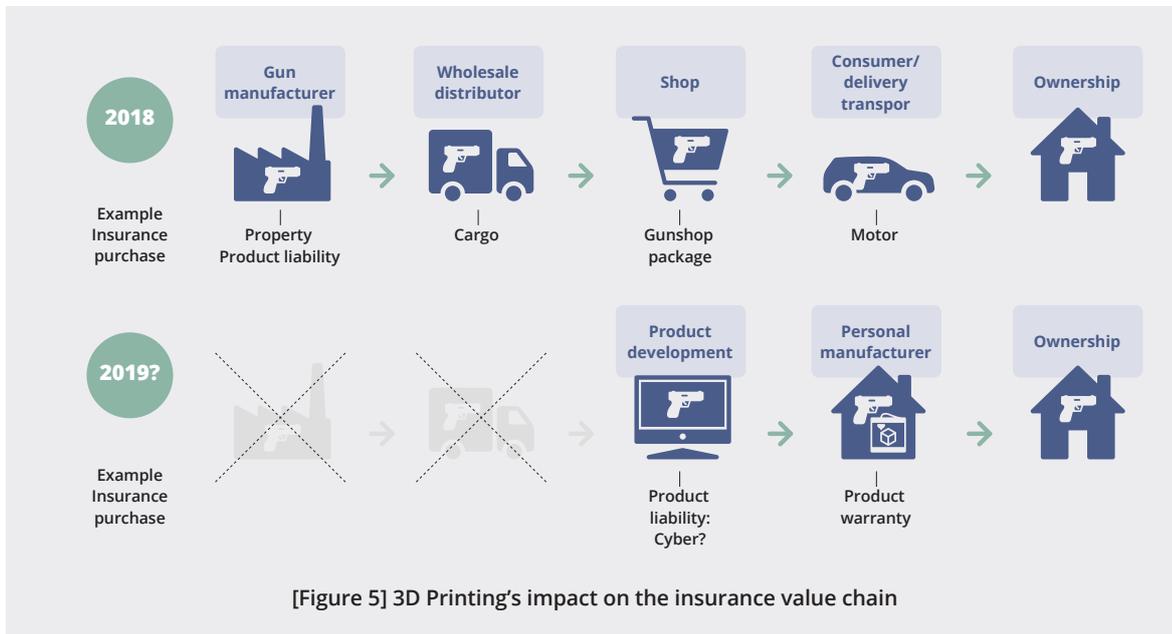
These are all challenges which the Lloyd's and London markets have successfully addressed and sometimes led in the past. Managing agents must ensure that they continue to be at the forefront of innovation in an era when change is driven increasingly by technology.

Socio-technological change

Arguably the most powerful external force is the way that technology is shaping the world more broadly. A topical example is 3D printing of guns. Concerns over gun safety are a mere sideshow to the broader impact 3D printing could have on the world. Taken to its extreme end-point, the technology eliminates the need for gun shops, which in turn removes the need for gun manufacturers. The elimination of physical retail makes wholesale distribution redundant, and consumers no longer drive to the gun shop. Mail order gun retailers are no longer needed, and delivery drivers find that their 'gig economy' jobs disappear. [Figure 5]

⁹ For a contrarian view on blockchain see <http://www.oxbowpartners.com/oxbow-partners-house-view-may-2018-blockchain/>

¹⁰ <https://www.munichre.com/topics-online/en/2017/12/hurricane-harvey> ¹¹ <https://www.oxbotica.ai/autonomous-vehicles-shuttle-staff-gatwick-world-first/>



This extreme scenario may not be likely for guns which require specialist manufacturing and are sometimes prestige items. However, it is imaginable in some form for simple, commodity products like office furniture or spare parts. (Reinventing the spare parts 'industry' could have broad implications on the economy as we move from a 'replace' to a 'repair' society.)

For managing agents, the implications are wide-ranging. Product liability for 3D printers could be significantly under-rated at present. But more alarmingly, millions of dollars of premiums could be eliminated as the retail industry shrinks and the distribution/logistics industry becomes a shadow of its former self.

3D printing is deliberately chosen as an example as it is sometimes not heard among the noise around vehicle automation, blockchain and other more hyped trends. It is merely one of many external forces which have the power to transform the world and insurance.

The impact on managing agents

Taken together, these drivers will lead to major convulsions in the core profit pools of many corporate & specialty insurers. Some opportunities will emerge, both tactical (e.g. data innovation in the underwriting process and the ability to fill protection gaps) and strategic (e.g. building a market-leading cyber liability proposition). New niches will emerge initially as pilots or proofs of concept and these niches could grow to become core products in the future.

It is not true that opportunities will necessarily accrue to those who are the current market leaders. Indeed, it cannot even be assumed that insurers will be the winners in the insurance market of the future. In a digital world, technology vendors (both established and today's InsurTechs) could provide critical infrastructure in tomorrow's value chain. The balance of power (and therefore profit) between insurers, brokers, other customer 'gatekeepers' and technology providers could fundamentally change.

The next section outlines five InsurTech-led trends that are observable in the market. Forward-thinking managing agents are already asking themselves which of these trends – and others – will impact their businesses over what time horizon and how they should prepare.

2. TRENDS IN CORPORATE AND SPECIALITY INSURTECH

In this section we outline five InsurTech-led trends which we believe create material opportunities or risks for managing agents. We do not posit these trends as comprehensive in either their scope or analytical depth. Instead, our aim is to highlight some real case studies of how InsurTech is impacting the market today and how these early trends could develop into major market dislocations. It is for executives to translate insight from these trends into specific scenarios for their own business and to develop a response bespoke to their own portfolio and strategy.

2.1 The transformational impact of data on underwriting

There is no shortage of statistics about the volume of data that is created each day. By 2020 we will be creating 44 zettabytes of data annually according to one source – 44 trillion gigabytes.

Personal lines pricing actuaries, especially in the UK, have been using huge amounts of data to price risk, calculate elasticities and combat fraud for years. At the same time, underwriters in many corporate and specialty lines of business have argued that there is insufficient data to be statistically significant for a pricing model. They say that rudimentary analysis of historic claims and years of professional experience are the only approach.

We disagree. We describe trends in data which support our view.

Next-generation industry databases

Next generation industry databases are helping specialty underwriters improve their view of risk – today. Pharm3r is a healthcare analytics company based in the US. Their flagship product is a dashboard with risk insights on drug and medical device manufacturers collected from multiple sources and organised using sophisticated analytical techniques.

Underwriters using the product can assess the relative riskiness of two pharma manufacturers' portfolios of drugs and portfolio managers can determine the insurer's aggregate exposure to high-risk active ingredients. Given that data is uploaded regularly (up to hourly) from various sources, trends can be identified quickly.

Pharm3r – and other industry databases – allows underwriters to move away from using experience metrics and judgement as the primary source of rating to an informed and quantified view of future exposure in niche areas.

Creating insight from unstructured data

Cytora is an example of a business that helps underwriters assess entire populations in a volume market. The business has developed a product called 'Risk Engine', which extracts billions of datapoints about a market – currently SME property – from the web and combines this with the insurer's internal data. With market-wide data, it allows insurers to improve the way that they target, select and price risk.

Insight is delivered into the insurer's pricing process, either as a simple datapoint on a dashboard or integrated more deeply. There are multiple benefits: questionless underwriting, greater insight into new business opportunities (where the insurer has no historic and little independent data) and ongoing portfolio analysis (as data is continuously updated, not only considered at the point of underwriting).

Move to behavioural data

Pharm3r and Cytora focus on providing insurers with better insight on static assets: Concirrus is focusing on risks that move.

Concirrus is a big data and analytics platform currently focused on the marine and motor insurance markets. Its platform, Quest, accesses and interprets large sets of historic, semi-static and real-time data (e.g. vessel statistics, machinery information and captain behaviour) and combines this data with an insurer's own information to analyse the portfolio and provide insights on how to improve profitability. The results enable insurers and brokers to quantify risk more accurately, for example by discovering behavioural rating factors that are more predictive than traditional, static ones.

In time, platforms like Quest can be extended to create new proposition features such as alerts to facilitate active risk management, either by the insured (e.g. risk-cost-adjusted selection of shipping routes) or insurer (e.g. dynamic purchasing of reinsurance).

Improving the quality of input data

Our final example in this section is Insurdata, which helps (re)insurers improve the quality of data they are using for underwriting and exposure management. Their technology enhances and augments building-level risk and exposure insight with, for example, precise location data, construction type and first floor elevation.

In a recent pilot with SCOR, Insurdata discovered that 44% of buildings in a portfolio had incorrect geographic identifiers and that 87% of properties were displaced by up to 25 metres; the greatest displacement was 1.3km. In our profile, we outline the materiality of these insights on the annual average loss of a portfolio, and therefore the value of using solutions to improve data quality.

Insurdata, and companies like it, provides a critical service for insurers. Only insurers with access to superior data quality will be able to cherry-pick risk out of government pools in the US and grow into new risk pools, for example. Indeed, those who do not focus on data may end up being selected against without noticing until losses start to show. We have seen this before in UK motor when aggregators emerged.

What does this mean for incumbents?

We see an investment in data as both a source of competitive advantage and protection against a strategic risk.

There are, however, some points of caution for managing agents when defining their approach. We outline two issues.

First, the benefits of embedding these kinds of data sources and analytics into the underwriting process vary by class of business. For some high volatility lines like medical liability, access to better data could create huge competitive advantage for carriers. But in classes where the loss profile is skewed to attritional losses, it is unclear to what extent better insight will create loss ratio advantage; there is always a trade-off between your view of the risk cost, the market price and the target margin. It might be that the greatest benefit from new approaches to pricing and underwriting in these classes is the reduction of the cost of underwriting through automation of the process.

Second, if 'next generation' pricing expertise is provided by a small number of Supplier InsurTechs that are used by the whole market, there could be new supplier concentrations leading to both systemic 'groupthink' risks and oligopolistic vendors able to extract disproportionate 'rents' from the market. This would not be the first time this had happened with 'black box' analytics vendors, an obvious example being the catastrophe modelling businesses.

But the greatest risk for managing agents is inaction. To benefit from the data revolution in the underwriting process incumbents need to do four things:

- 🔗 **Technology and vendors:** Think strategically about where to build capabilities internally and where data or analytics partnerships are preferred; in those cases ensure partnerships are structured to create value long term.
- 🔗 **Culture:** Change the culture of underwriting teams that deny that data can be transformational and continue to rely on judgement. Are your underwriters going for lunch with data scientists or only brokers?
- 🔗 **Data hunting:** Everyone agrees that performance would be better with perfect insight, but where is it? It is not for nothing that Munich Re now has a team called 'data hunting', whose role it is to find sources of insight that competitors have not yet discovered.
- 🔗 **Operating model:** Create multi-disciplinary teams where underwriters, data scientists (including actuaries) and technologists work together to augment an art with science.

2.2 Disintermediation in SME insurance

The SME market has been ripe for disruption for years. Premium sizes for many SME products are low – often significantly lower than many personal lines products – yet distribution is still dominated by manual and therefore expensive broker processes.¹² A group of online brokers emerged in the later stages of the last decade to address this opportunity. Simply Business was the winner in this cohort; the business was sold to Travelers for £400m in 2017 – a 50x EBITDA multiple.

But the reality is that one still cannot claim that SME insurance has been significantly disrupted by the emergence of digital channels. We think that there are now new drivers of change.

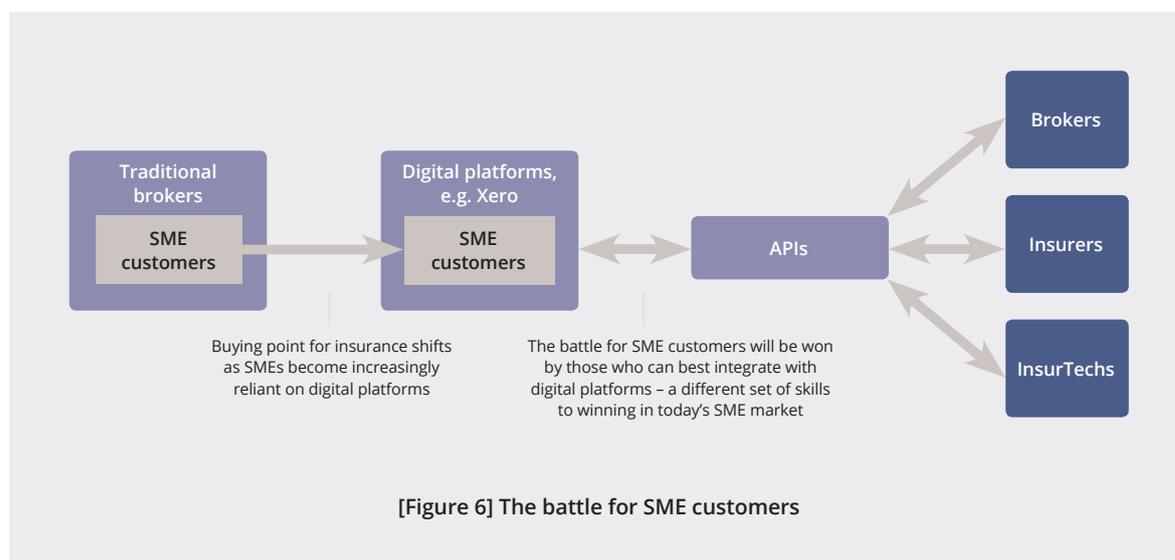
Our hypothesis is centred around the emergence of cloud applications targeting SMEs. Over the next decade, these platforms (e.g. Xero for accounting, Amazon Business for sourcing, and online business banking) are likely to become the gatekeepers to millions of SMEs, similar to the way that social media platforms have become the access point to consumers.

Consider an SME using an accounting platform. Every day the CFO logs in to issue invoices, pay bills and manage cash. There are natural trigger points to offer financial services products, for example invoice insurance when billing. Given that an accounting platform has unparalleled insight into a business's finances (ignoring for now what data permissions it has), it could offer tailored PI insurance quotes 11 months after the company last made a payment to its insurer.

We think it is plausible that these platforms could soon be the primary distribution channel for micro SMEs and important channels for certain niche specialty products for larger SMEs.¹³

There will be a battle between insurers, brokers and InsurTechs to access these customers in these channels. [Figure 6]

The battle will be complicated as there are multiple and overlapping routes to market. Brokers and insurers could partner with InsurTechs in multiple constellations. The winners in the battle for customers will be those who can offer



seamless integration into distribution platforms and products tailored to specific customers using bespoke data. In the digital value chain, there is no role for hand-offs to contact centres or manual data entry and paper policy issuance – unless data proves that this enhances the customer experience and is economically the correct course of action.

In this report we have profiled three InsurTechs active in this space.

¹² Note that in this paper, SME refers to enterprises of fewer than 250 employees, unless where we refer specifically to 'micro SMEs'. Many managing agents include much larger business as SME. ¹³ For the avoidance of doubt, we do not see any evidence to suggest that larger SMEs will move away from brokers, whose advice they still rely on to navigate their risk profile and insurance buying.

Nimbla and Hokodo are InsurTechs which are working with digital platforms, albeit with slightly different propositions.

Nimbla allows users to integrate their cloud accounting package with its platform, on which users can selectively insure invoices. It is using data from an online platform to power its own proposition.

Hokodo allows platforms to access its APIs – a ‘digital plug socket’ – to integrate insurance sales into their own customer journeys with only a few lines of code. In other words, Hokodo is a largely invisible product provider to third party platforms. The business is starting with invoice insurance and goods in transit protection.

Both Nimbla and Hokodo have a narrow product focus at present but it would not be a stretch to believe that they have aspirations to broaden significantly their offering for SMEs, for example adding PI and property insurance in time. If this strategy is successful, change could be rapid. The difference to previous attempts to digitise the SME market is that SMEs don’t consciously switch from a traditional broker to an online broker. Instead, they simply realise that they no longer need their offline broker – a bit like the way they didn’t actively stop going to the shop to buy stationery, but simply found that they were buying more and more from Amazon.

MGAM is a digital MGA which serves as the ‘digital glue’ between a broker or capacity provider and distribution through its electronic full-service binding authority system. It allows incumbents to access digital channels quickly. For example, it has arranged SME insurance for Bought By Many, a personal lines InsurTech, giving ‘non-digital’ markets access to digital growth opportunities.

What does this mean for incumbents?

There are several strategic challenges:

- ❑ **Disintermediation of brokers:** There is no role for brokers to provide administrative services in the value chain in the way that they do today. Brokers could be disintermediated if InsurTechs or insurers have better tech to access customers on platforms. The brokers’ role would be limited to deal advisory (i.e. helping the platform select insurance partners) or arranging capacity for InsurTechs, neither of which are established roles at the moment.
- ❑ **Disintermediation of insurers:** If insurers do not own the digital plumbing, they could be disintermediated by reinsurers trading direct with InsurTechs. For instance, Nimbla is getting capacity directly from the reinsurance market (Munich Re).
- ❑ **Concentration of purchasing:** The access points to SMEs could reduce from several thousand brokers to hundreds of platforms. This will lead to concentration of distribution; although aggregate capacity could increase as digital distribution closes protection gaps (i.e. areas where it is uneconomic for brokers to sell products today), capacity could be provided by a small number of dominant or specialist carriers. These carriers may provide capacity globally challenging local players (but possibly favouring the Lloyd’s market with its global licences).

To survive the ‘platformisation’ of SME insurance, managing agents need to determine where in the digital value chain they want to play and link their business strategy to a clear technology strategy. A cultural transformation is likely also required as managing agents engage directly with tech companies.

2.3 The evolution of the insurance product

The insurance product of the future could look very different to today’s. In this section we highlight three innovations facilitated by data and technology.

Predict and prevent services

The insurance industry has traditionally been focused on making indemnity payments on claims as they arise. The industry is now considering how it can ‘predict and prevent’ claims from arising in the first place. An example of a business operating in this area is Shepherd which provides a platform to aggregate data from sensors in buildings to allow facilities managers and insurers to manage risk better.

Shepherd analyses data from devices connected to a building’s vital systems and builds a picture of emerging risks. For example, some escape of water claims can be predicted from subtle changes in water pressure in the system. When symptoms are observed, Shepherd warns the facility manager to address the problem before an adverse event (or claim for insurers) occurs.

Businesses like Shepherd benefit both the client and the insurer. The client experiences fewer disruptions to their business and the insurer benefits from enhanced risk management and increased quality of risk in their portfolio. By partnering with data creators, insurers are able to provide their clients with a differentiated risk management service.

We expect that these kinds of propositions will become more common, particularly in lines (like cyber) where indemnity can be hard to calculate and is, in any case, of secondary importance to policyholders to issues like business continuity and reputational risk management.

Parametric insurance

At the other end of the spectrum, data facilitates the development of much simpler products. Parametric insurance pays out a defined amount if a certain trigger is hit; no loss needs to have been suffered.

FloodFlash is an InsurTech which pays out a specific amount depending on the depth of a flood measured by the policyholder's sensor. There is no need for a claims process (beyond validation of the water depth) and actuaries need only establish the return periods of flooding and not the quantum of ensuing losses; these issues considerably reduce operational costs.

We expect these kinds of propositions to grow for two reasons. As sensors become cheaper to produce the amount of data they produce will increase. This means that there are ever more acceptable reference points to use as the trigger. This is relevant not only in SME risks but also in the corporate segment. For example, policy wordings referencing sensors could significantly reduce the amount of time loss adjusters and lawyers argue over 'occurrence' wording on anything from a warehouse fire to an offshore well.

Highly tailored products and pricing

Our final example in this section is Flock. This business has built a big data analytics platform to ingest static, contextual and real-time data to price drone insurance. Static data includes drone information and operator profiles; contextual information includes the location of the flight (e.g. proximity to major roads) and real-time data includes information like hyper-local weather conditions.

By combining these datapoints, Flock is able to provide highly tailored products and pricing to its policyholders through its app.

The broader application of an application like Flock is not hard to spot. For example, the platform could be used for other (more mainstream) lines of business like marine pleasure-craft, or the analytics could be deployed as back-end technology in industrial IoT propositions.

What this means for incumbents

The acceleration of technology and data innovation is creating opportunities for insurers to drive new product, channel and customer strategies. The challenge is rarely finding ideas for the hopper; it is more often prioritisation and execution. Insurers need to identify opportunities that are of a transformational scale and create the infrastructure, environment and culture to deliver them.

There are two broad types of opportunity:

- 🔍 **Insurer-driven innovation:** In this case, the insurer identifies and drives an idea, often with the support of a partner. Insurers' work on technical initiatives like data quality might be an example here.
- 🔍 **Market-driven innovation:** Many ideas are likely to be generated outside insurance and will be brought into the industry by entrepreneurs. Shepherd's work in facilities management and subsequent push into an insurance proposition is a good illustration.

Managing agents must create structures to optimise the innovation portfolio. These structures will vary between players. For insurer-driven innovation it is important to have internal structures that allow ideas to be generated, developed and executed. For market-driven innovation, insurers need to ensure 'porosity' of intellectual capital between themselves and the outside world.

We see partnerships as being hugely important for product innovation and arguably the best demonstration that InsurTech is now an opportunity for incumbents to work together with innovative startups rather than being disrupted by them. No managing agent has the resources to innovate across all lines of business and in all geographies. Partnerships allow incumbents to outsource much of this effort, creating larger portfolios of innovation and achieving better risk-adjusted return on innovation efforts.

2.4 The digitisation of information

Visitors to EC3 tend to notice the amount of paper that is carried around. The digitalisation of the value chain is unsurprisingly a focus for multiple market initiatives and of managing agents' activities.

In this chapter we highlight two areas which demonstrate the opportunities for managing agents and have broad applicability to the market.

Placement

The first step to eliminating paper in the market is to put in place a digital trading system. Whitespace has built technology to facilitate placement in the Lloyd's and London markets. Its objective is not to change the way business is transacted but instead give underwriters and brokers digital tools that help them trade more efficiently.

Whitespace's placement platform digitalises the insurance contract and transforms it into a universal data format that can be used by all parties involved in the transaction. Contracts can be shared with other parties who can all edit them with a clear change log. Shares can be proposed and confirmed, again with a transparent and auditable process.

Further use cases are imaginable. For example, simpler contracts could become 'smart contracts' meaning that the system could automatically verify if claims are valid or not and could automate payments in time.

The company's pivot to this proposition is timed well: Lloyd's mandated electronic placement in early 2018 and approved PPL as the first system. Whitespace hopes to be approved soon.

Natural language processing

Despite industry efforts to digitise, it is likely that a significant amount of information will remain as unstructured data. This might be new data (e.g. complicated contracts or customer emails) or historic data (e.g. loss inspection reports). For these cases, natural language processing (NLP) can help insurers generate insight.

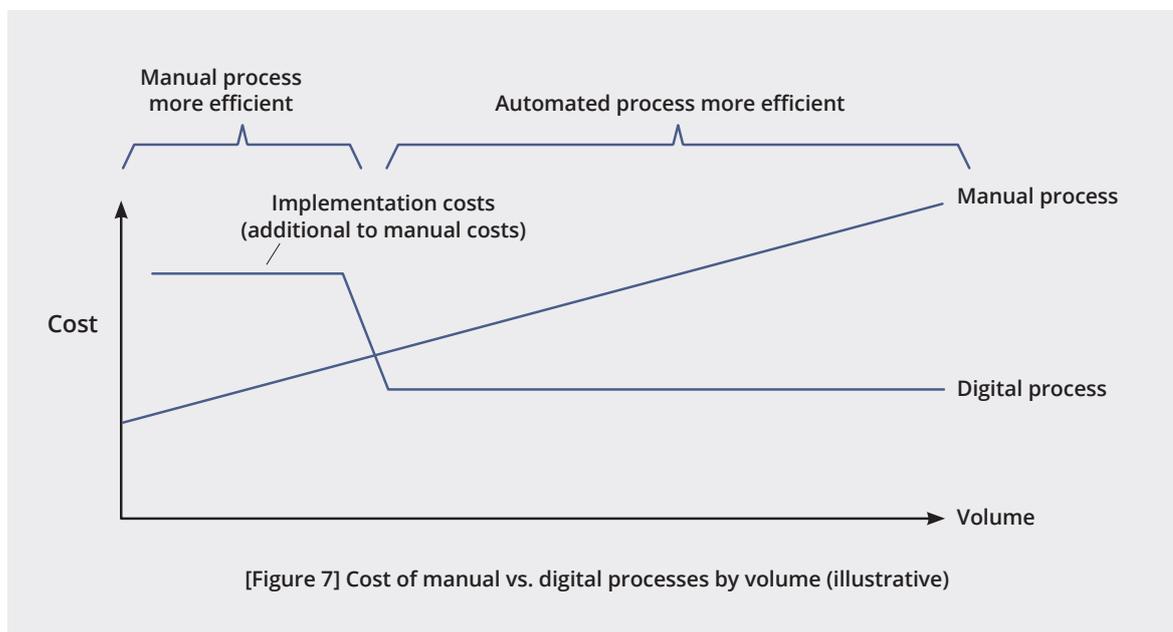
Eigen Technologies uses NLP to automate the extraction and classification of information from documents using machine learning. One of the business's early breaks occurred in the banking industry in automating compliance with US financial regulation. Eigen's technology enabled its clients to automate regulatory processes at scale.

We see significant opportunities in the Lloyd's and London markets. For example, placement documentation can be reviewed to highlight critical information (e.g. references to sanctioned individuals and high-risk construction materials). Loss inspection reports can be scanned for recurring loss causes that may not be evident to individual claims handlers, client emails can be directed to the most appropriate handler and triaged for urgency. Impact 25 Member, Risk Genius is another InsurTech active in this field.

What this means for incumbents

Back-office processing is necessarily a broad and complex topic. Some solutions will be market-wide, top-down infrastructure projects (e.g. e-trading at Lloyd's) and others specific to an individual insurer (e.g. moving data from one in-house system to another).

Managing agents need to identify where there are genuine efficiencies from digitisation. This will often require complicated cost/benefit trade-offs. Indeed, many of the benefits may not be real savings, but could be the elimination of opportunity costs, which are difficult to quantify (e.g. if an accountant spent less time doing reconciliations they could be 'adding value' by looking at more complicated issues). It is important to remember that digitalisation is not always the right economic choice. [Figure 7]



Companies need to create robust processes to surface opportunities to improve organisational efficiencies and to evaluate these against other items in the strategic project pipeline.

2.5 The transformation of claims

Claims will benefit from many of the trends in other parts of the value chain. For example, digital underlying policy information means claims validation will be much quicker and many claims might even be paid automatically. The emergence of parametric products will mean you might not need a claims function in its current form, but there will be greater need for technology to scan for fraud (which is already a critical component of the personal lines market). On the other hand, the emergence of 'predict and prevent' propositions will create greater operational complexity and a different set of skills amongst claims handlers. The claims department of the future could look hugely different to today's.

Improved customer experience

Our first case study centres on the opportunity to create better customer experiences in the claims journey, whilst also collecting better data. (Indeed, these two things often go hand-in-hand.) Customer experience is an important component of many managing agent's customer strategy – client 'intimacy', 'focus' and 'centricity' are words seldom omitted from any executive strategy presentation.

RightIndem is a SaaS digital claims platform that supports all classes of insurance from commercial marine to personal motor. It is a white label solution which insurers, brokers and service providers use to deliver a digital claims experience for their customers. In the Lloyd's context, insurers could use the platform to service claims on SME business distributed via delegated authorities.

RightIndem has several modules at different parts of the claims journey. At eFNOL stage, policyholders submit a voice and video recording instead of running through a long script. At the analysis stage, its algorithms screen for fraud and speed up legitimate payments. At the repair or payout stage, it guides customers through their options and offers transparent insight into how the settlement figure has been calculated.

Intelligence providers

Our final two InsurTechs provide intelligence to insurers.

McKenzie Intelligence Services helps insurers quantify losses shortly after catastrophe events have occurred. MIS creates a matrix from high-quality satellite imagery and other sources such as CCTV, flood and wind sensors. Users can overlay their portfolios to assess likely damage.

Certain losses can be assessed and settled without the need for on-the-ground loss adjusting. This has huge opex advantages for insurers as the demand spikes that are a feature of adjusting after large events like hurricanes can be reduced or avoided.

At the portfolio level, MIS gives insurers an estimate of their loss within hours of the event and allows loss reserving to be significantly more accurate and not reliant on models.

Geospatial Insights performs a similar role. The business uses machine learning and big data analytics to generate insight from satellite, drone and aircraft imagery.

What this means for incumbents

Our work in claims shows us that there is huge potential to make processes more efficient. However, technology is only part of the solution as many of the challenges experienced by managing agents derive from traditional business problems: poor data capture, TPA agreements that are not rigorously monitored and resources that are allocated based on what is top of the in-tray but not the value of those tasks.

To benefit from the opportunities in claims, managing agents should:

- 🔗 **Develop the strategy:** Understand what clients and intermediaries need from claims and design a vision based on that. It is important to step back from the status quo.
- 🔗 **Review costs:** Managing agents should review their claims cost base (opex and indemnity by line of business, TPA etc.) and understand line by line where they are over- and under-spending.
- 🔗 **Create a segmented operating model:** Not all claims are equal. Managing agents should understand their mix of claims, for example large vs. small, low complexity vs. high. They should design an operating model that triages claims and allocates resources appropriately.
- 🔗 **Technology:** Based on these design principles, managing agents should identify where traditional and innovative technology can help them build a vision of the future.

There is some good news here for managing agents. Most insurers have a lot of senior claims resource spending time on low value activities. By realigning this resource, for example onto complex claims to manage indemnity, the payback period on broader claims transformation investments can be surprisingly short.

3. WHAT THIS MEANS FOR LEADERSHIP TEAMS

We are convinced that there are huge opportunities for forward-thinking managing agents, (re)insurers and brokers to benefit from InsurTech-led innovation – but as we have said above, it is not a tide that lifts all ships equally.

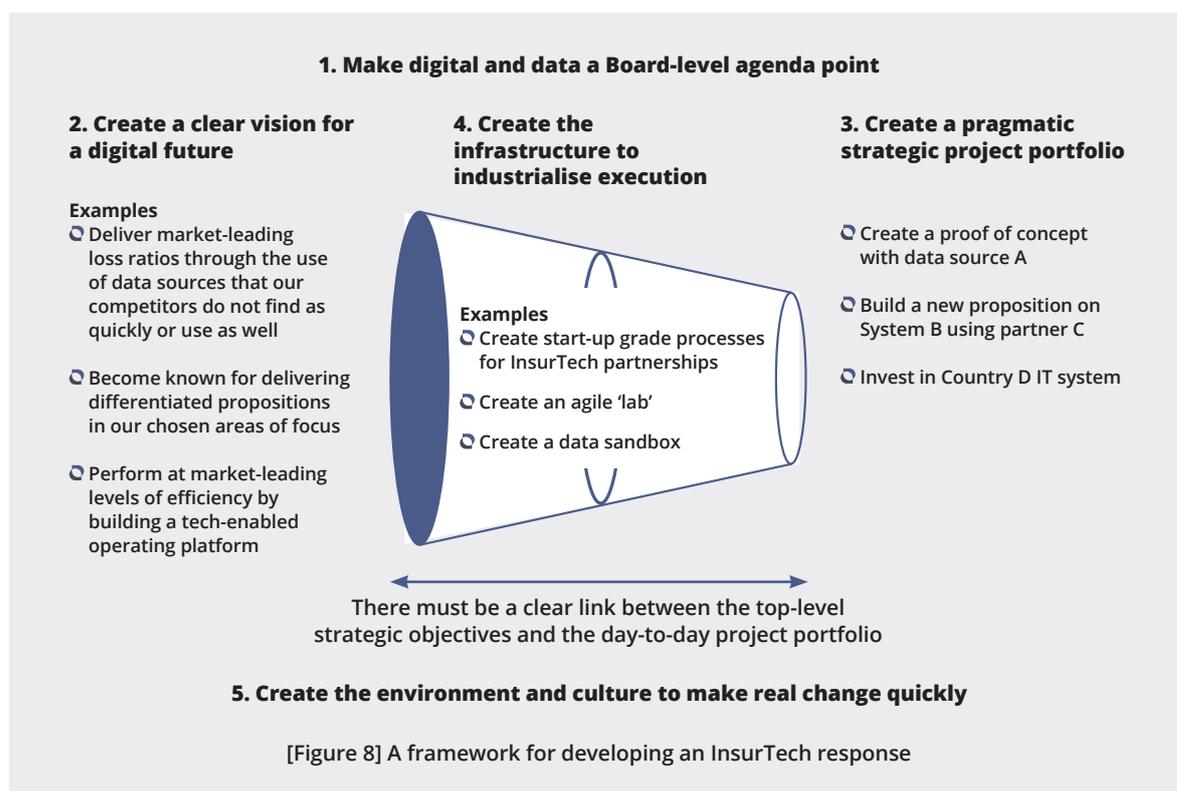
Our guidance to managing agents is to take a sober, analytical approach to the challenges and opportunities presented by InsurTech. Leaders must neither be dazzled by the hype nor be pushed to cynicism by its (perceived) lack of impact to date.

The winners will be those who understand that InsurTech is both a trend and a tool. The InsurTech trend means that managing agents should be more ambitious with their strategy and harness the opportunities presented by new technologies and methodologies. They must also have the vision and processes to spot, attract and engage with promising InsurTechs relevant to their strategy and portfolio – tools that facilitate strategic execution. This will require, in most cases, cultural transformation, as well as a change in companies’ approach to strategy an technology.

To be a winner, managing agents need to do the following:

1. Make digital and data a Board-level agenda point

We believe – and hope that we have proved through this report – that digital and data should be a critical strategic transformation project for managing agents. To this end, it should be positioned at the Board level to ensure focus and attention, but also to ensure that the organisation’s vision cuts across the entrenched interests of any part of the business. For example, underwriters might prefer lunching with brokers than data professions and claims leaders may be sceptical about redeploying resource based on insight from digital technology – but these are some of the changes driven by InsurTech.



2. Create a clear vision for a digital future

Every company should have a clear vision about its digital future. This needs to be a concise, high-level picture recognising the specific features of the company. The company should consult widely to ensure that 'unknown unknowns' are reduced to the extent possible, but also ensure that the vision is not so far removed from today's reality so as to be unachievable, or unachievable in any reasonable timeframe. This is a difficult balancing act.

Part of a company's strategy should be consideration about where in the innovation lifecycle it wants to focus (see figure 4). Larger companies or segment specialists may want to assign innovation resources to find product-market fit on more speculative ideas. All companies should be focusing on technologies and methodologies that are ready for the 'rocket fuel' in their area of activity.

3. Create a pragmatic strategic project portfolio

The vision needs to be connected to a pragmatic delivery roadmap – a set of specific projects that enable the vision. The company's project portfolio (which goes beyond innovation, of course) needs to be managed actively. All too often we observe that companies fail to deliver projects effectively because too many projects are live leading to over-stretched resources.

Ideally digital and data projects need to be incremental so that value is delivered at each staging point.

4. Create the infrastructure to industrialise execution

Some projects will benefit from investments in infrastructure. For example, startup partnerships can be executed much more quickly if the corporate has created 'startup grade' processes which focus on critical strategic, regulatory and legal issues rather than the full suite of questions that a claims TPA may be asked. These processes might be deployed as part of a 'corporate lab' where rapid testing of ideas is encouraged, but must have the blessing of central functions like legal.

In some cases technical infrastructure may be suitable. Companies focused on data might decide to build a 'data sandbox'. This allows the velocity of data proofs of concept to be accelerated by making data available in a safe and controlled environment to innovators.

5. Create the environment and culture to make real change quickly

Companies that are driving execution only top down will not succeed. Managing agents must employ staff who are hungry to explore a more digital future for their business and who see the opportunity from analytics and technology.

Companies must not be afraid to employ individuals who are willing and able to crash through corporate governance processes to make change happen. These people must be rebellious but not reckless. Sometimes they must value project delivery over being in their boss's good books. They are therefore hard to find.

Leadership must encourage creative thought and experimentation. To do this, governance processes may need to be adapted to allow decisions to be made based on confidence generated from robust but more focused analysis rather than requiring (false) certainty from a fully-developed business case. A consequence of this is knocking down the often high walls between strategy and execution – a separation that often leads to unnecessary conflict and poor knowledge transfer. This must all be done whilst recognising that managing agents cannot afford for either economic or regulatory reasons to make many significantly wrong decisions, so appropriate control processes need to remain in place.

And we end with a cliché – management must be tolerant of occasional failure. As one contributor to this report noted, "some innovation is just magic". You won't find the magic without some failed searches along the way. The winners will be those who have the best processes to continuously change direction in their search when they learn new information, and dig fastest every time they think they have arrived.

4. INSURTECH PROFILES

We have referenced fifteen InsurTechs in this report and profile them in this section. In keeping with our InsurTech Impact 25 report, we chose startup businesses that have progressed beyond ideas but are not household names. We excluded any business that is part of an established corporate entity.

Our selection is intended to illustrate activity along the value chain; we emphasise that there are hundreds of other InsurTechs in the market and many advisors and organisations like the LMA and InsTech London are happy to help corporates with 'scouting'.

See the final page of this report for details of organisations who can help you further.

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Concirus allows insurers to augment internal data with external sources to provide greater insights

Concirus is a big data and analytics platform currently focused on the marine and motor insurance markets.

Concirus' platform (called Quest) accesses and interprets large sets of historic, semi-static and real-time data (e.g. vessel statistics, machinery information and driver behaviour). It combines this data with an insurer's own information to analyse the portfolio and provide insights on how to improve profitability.

The results enable insurers and brokers to quantify risk more accurately and identify areas of opportunity. Quest also makes it possible for insurers to offer new, more targeted products and connected marine insurance policies.

Company summary

Year founded: 2012

Insurance clients: AON, Maersk, Acorn

Active in: UK, USA

External investment: £12m

Latest round: £5m (Q3 2018)

Main investors: IP Group, IQ Capital, EOS Venture Partners

Notable individuals: Andy Yeoman, Co-Founder & CEO: Tech and insurance entrepreneur

Craig Hollingworth, Co-Founder & CDO: IoT entrepreneur

Case study

Client situation: Commercial marine insurance is a highly competitive market yet the client, a leading player, had not exploited opportunities to gain advantage through the use of advanced analytics or new approaches to rating (as a motor insurer would have done). The insurer asked Concirus to understand whether behavioural and situational analysis of their portfolio could help them operate more efficiently.

What they did: Quest Marine was deployed to ingest five years of policy, claims and exposure data from the customer. This data was combined with Concirus' proprietary datasets.

Impact: Quest Marine provided new insights into the performance of the portfolio. The insurer was able to make changes on how risk was selected, priced and managed to improve their loss ratio by more than 7%.

Case study

Client situation: Acorn, an insurer specialising in non-standard motor risk and young drivers, wanted to grow their book in what has been a traditionally unprofitable market.

What they did: Quest Motor was deployed to analyse telematics data from connected cars. This provided insights into driver behaviour and other indicators that could be used by the business to improve the quality of its portfolio.

Impact: Acorn has been able to identify better risks, actively manage risk by rewarding safer behaviour, offer its customers more affordable premiums and attract new business. Acorn now has one of the fastest growing books of businesses in the market while maintaining a healthy combined ratio.

The Oxbow Partners view

One market participant remarked in our research that if we had told them 12 months ago that marine would be at the forefront of tech-led change in the industry, they would not have believed us. But marine is blazing a trail – no doubt reflected in Concirus's latest and substantial funding round.

Concirus has an opportunity to become a

dominant 'next generation' pricing platform. The company has demonstrated an ability to form partnerships to expand its reach. The team now needs to win the race for broad adoption: a hypothesis laid out in section 1 of this report is that the market tends to gravitate to a small number of infrastructure providers, suggesting that rapid business development is critical.

Cytora

Cytora offers an AI underwriting engine for commercial insurance

Cytora uses artificial intelligence and external data to improve the way commercial insurers target, select and price risk. Cytora's product, the Risk Engine, works by continuously extracting, verifying and connecting billions of data points from external and internal sources and computing a rank, score and price for every business in the population. Scores and prices are calibrated against insurers' internal data to generate unique discounting and loading rules to support different pricing strategies.

The Risk Engine operates at the portfolio level to identify profitable segments and at the underwriting level to enable better risk selection and pricing decisions. The Risk Engine also facilitates questionless underwriting.

Company summary

Year founded: 2014

Insurance clients: MS Amlin, XL Catlin, QBE, Starr

Active in: UK, USA, Australia

External investment: £6.8m

Latest round: £4.4m (Q4 2017)

Main investors: Starr, QBE, CIC, Cambridge University

Notable individuals: Richard Hartley, Co-Founder & CEO; InsurTech Entrepreneur Hank Greenberg, Investor; Former CEO, AIG

Case study

Client situation: A large commercial insurer wanted to increase profitability by reducing underwriting and distribution costs in SME business.

What they did: Cytora's Risk Engine was able to pre-price all potential customers in the SME market based on externally available information and rank them in micro-segments according to loss ratio. This allowed the insurer to benchmark all its incoming business against the total population and target the most profitable accounts. It also enabled risk selection and pricing to be automated across a pipeline of submissions from panels and aggregators.

Impact: The insurer is projected to reduce their SME underwriting expenses by 10% over the following underwriting year. Equipped with new data and insight into the best performing segments, the insurer can now use targeted advertising to grow their book in the most profitable areas.

Case study

Client situation: A commercial insurer wanted to understand why attritional losses were rising quickly in a portfolio and specifically whether this was a short-term or structural effect.

What they did: Cytora compared the insurer's portfolio against peer frequency, severity and loss costs and recommended that the insurer shrink or exit eight underperforming segments and grow in six outperforming ones. Cytora helped the insurer integrate its risk scoring and pricing into its existing underwriting workflow, enabling underwriters to select and price risks on market-wide experience at the point of quote and renewal.

Impact: On the basis of initial modelling results, the insurer is projected to reduce their commercial property loss ratio by 8 percentage points over the following underwriting year, and improve conversion in target segments.

The Oxbow Partners view

Cytora is at the forefront of the InsurTech 'movement'. It is building a strong track record with insurers and generating solid recurring revenues. The management team benefits from the experience and connections of an impressive set of investors.

There are multiple use cases for working with Cytora – optimisation of marketing spend, improved customer experience, better pricing/underwriting decisions and lower operational costs. Cytora offers a powerful proposition.

Eigen Technologies uses Natural Language Processing to automate the extraction of data from documents using machine learning



Company summary

Year founded: 2014
Insurance clients: Hiscox (& Goldman Sachs, Evercore, ING)
Active in: Asia, USA, South America, Europe
External investment: £13m
Latest round: £13m (Q2 2018)
Main investors: Goldman Sachs, Temasek
Notable individuals: Dr Lewis Z. Liu, Co-Founder & CEO: Physics PhD turned entrepreneur
 Jonathan Feuer, Co-Founder & Chairman: Former Managing Partner of CVC Capital

Eigen Technologies allows insurers to extract data from documents, emails, and other sources. Its algorithms learn to recognise patterns in text and provide answers to specific questions. This has multiple use-cases, for example contract review (the existence of certain clauses in insurance policies) or optimization of customer service processes (the level of urgency of emails).

The software is designed to be used by non-technical users and is deployed on the client side meaning that no data is transferred to Eigen Technologies. The technology is not trained on any specific language and can therefore be applied to any language. Use cases in insurance are across the value chain from underwriting to claims.

Case study

Client situation: Hiscox wanted to reduce the cost and increase the speed and accuracy of manual processes.

What they did: Eigen partnered with Hiscox to deploy its technology and allow employees to train the product to extract insight from unstructured, qualitative data.

Impact: The pilot is ongoing.

Case study

Client situation: A US bank needed to prepare for a major new regulation. To do this, the client was obliged to review hundreds of thousands of contracts and determine the existence or otherwise of a certain set of clauses. The client decided to assess the feasibility of a technology solution rather than deploying a team of lawyers.

What they did: Eigen was invited into a vendor selection process. They trained and deployed their product under 'exam conditions' and were found to be both the most accurate vendor and the one with the most flexible deployment options.

Impact: The client was able to create a process for providing the required information at considerably lower cost than by deploying a manual solution. Eigen's product is now used on an ongoing basis for day-to-day regulatory compliance, among other uses.

The Oxbow Partners view

Supplier InsurTechs perhaps don't have the glamour of brilliant front-end solutions, but we have always argued that they could have a transformational impact.

A lot of information is transmitted in unstructured form in the London Market and this is likely to remain true despite the efforts of other companies covered in this report like Whitespace because of the complexity and bespoke nature of a lot of the

business transacted. We therefore believe that solutions like Eigen Technologies can have a transformational impact on insurers' processes and opex.

It is important to add, however, that NLP alone is not a solution. Insurers need to consider their processes end-to-end and ensure that they are digitising the right information and using that insight effectively in their operations.



Flock uses big data analytics to price pay-as-you-fly drone insurance

Flock's algorithms aggregate static, contextual and real-time data to provide risk management information and offer pay-as-you-fly drone insurance to drone operators. Static data includes drone information and operator profiles, contextual information includes the location of the flight and proximity to hazards and real-time data includes hyper-local weather conditions.

Flock renders risk management information and its quote-and-buy functionality in the Flock Cover app. The app is used by commercial, recreational and in-training drone pilots.

Claims are processed by Flock's digital claims platform which minimises fraud by reconciling customer claims reports with external data.

Company summary

Year founded: 2015

Underwriting capacity: Allianz

Active in: UK

External investment: £2.75m

Latest round: £2.25m (Q2 2018)

Main investors: Anthemis, Plug & Play, Seed & Speed

Notable individuals: Ed Klinger, Co-Founder & CEO: Oxbridge engineer, technology academic turned entrepreneur
Antton Peña, Co-Founder: Industrial designer, serial entrepreneur

Case study

Client situation: Allianz underwrote drone insurance via brokers and on an annual basis. After meeting Flock, they identified the opportunity to offer a pay-as-you-fly product.

What they did: Flock built and launched a drone insurance platform to facilitate the distribution of intelligent, real-time and risk-dependent insurance premiums through a smartphone application (Flock Cover).

Impact: Since the launch of the Flock Cover app eight months ago, 2,700 customers have registered with Flock. This includes some 30% of commercial drone operators in the UK.

Case study

Client situation: A pilot flying occasional drone missions wanted insurance that reflected his requirements rather than an inflexible annual policy.

What they did: Flock created a pay-as-you-fly drone insurance application, which allows the purchase of fully customisable, hourly insurance policies from £4.95.

Impact: The pilot now has more control over his insurance spending and risk management and is able to pass the cost of insurance directly to his customers.

The Oxbow Partners view

Commercial and speciality insurers should look at Flock as an example of the potential future of insurance analytics rather than as a drone insurance app. The team have demonstrated their ability to combine multiple data types and sources into a pricing algorithm. This has applications in areas such as commercial IoT (i.e. sensors in buildings) and claims.

Having established a strong market presence with new technology in a small but growing market we expect that Flock will be scaling up its offering into new areas of insurance in the near future. A point we make in section 2 of this report is that new applications will spread quickly (e.g. from one line of business to another) when they have been proven to work in one industry product.



FloodFlash is an MGA offering a parametric flood insurance product

FloodFlash provides customers with a proprietary sensor to install at their property. If water reaches a certain level, it automatically pays out a cash 'settlement'. Customers can choose their settlement level and the depth at which it is triggered.

The parametric trigger makes this a low-cost business model: once claims are verified by matching sensor data with external data sources, there is no need for any further claims service as damage does not need to be proven, quantified or rectified by the insurer.

Company summary

Year founded: 2017

Underwriting capacity: Everest Re

Active in: UK

External investment: £2.1m

Latest round: £1.9m (Q3 2018)

Main investors: LocalGlobe, Pentech Ventures, InsurTech Gateway

Notable individuals: Ian Bartholomew, Co-Founder: Former Consultant at RMS
Adam Rimmer, Co-Founder: Former Consultant at RMS

Case study

Client situation: A commercial insurance broker was unable to source affordable coverage for clients located in a high flood-risk area of the UK.

What they did: FloodFlash created a pilot scheme for the broker's clients. Each business selected trigger depths and settlement amounts that were appropriate for them. Several had previously installed physical flood barriers to protect them against smaller events, allowing FloodFlash to offer the clients competitive premiums.

Impact: The broker's clients could afford protection against flood.

Case study

Client situation: A packaging plant in a high flood-risk area of the UK had spent six-figure sums on mezzanine storage, pumps and flood barriers. Their insurer still imposed an unaffordable flood excess which meant the business would risk insolvency following a large flood event.

What they did: The client used FloodFlash's cover as an excess protection policy, triggering at the depth at which the physical defences would be overwhelmed.

Impact: The packaging plant owners now had an acceptable level of flood insurance excess.

The Oxbow Partners view

The data revolution is making it much easier to create products with digital triggers. These products could be either parametric or traditional (i.e. indemnity). We see considerable opportunities for parametric offerings as there is value in the certainty of rapid, fixed settlements for customers (although this must be balanced with the risk of mismatch to the loss).

Second, it is interesting to note that FloodFlash does not need a claims department as settlements are fixed and losses do not need to be physically validated. This is another example of how product innovation could lead to value chain compression as digital platforms connect distribution directly to capital (reinsurers) with no need for the traditional capabilities of primary insurers.



Geospatial Insight uses advanced analytics to draw insight from aerial imagery

Geospatial Insight uses machine learning and big data analytics to generate insight from satellite, drone and aircraft imagery. The insight helps underwriters gain a greater knowledge and understanding of risk, allowing for better pricing and risk selection.

Visual intelligence can also be used to assess the impact of a catastrophic event rapidly. Geospatial Insight helps insurers understand the scale and severity of damage, aids loss estimation and enables quick reserving and reporting.

Some of the more innovative applications of Geospatial Insight's product include pre-bind risk analysis and building condition assessment.

Company summary

Year founded: 2012

Insurance clients: Flood Re, Marsh, Guy Carpenter

Active in: Global

External investment: £4m

Latest round: £3.5m (Q3 2018)

Main investors: VenturesOne, Foresight Williams, Midven

Notable individuals: Dave Fox, MD: 30 years in the geospatial sector
Aman Bajaj, Insurance Lead: Trading Manager at Axia

Case study

Client situation: A large insurer wanted to use aerial image analytics to increase the speed of hurricane claims assessments.

What they did: Following hurricane Harvey, Geospatial Insight geocoded all relevant policyholder data and collected and analysed image data (despite complications from limited cloud-cover and restricted airspace).

Impact: Within a week of Harvey making landfall, Geospatial Insight delivered assessments of storm and flood paths, detailed property-level assessments of damage and a customer-facing user interface to allow policyholders to access information such as damage estimates.

Case study

Client situation: An insurer wanted to map the impact of the Tianjin port chemical explosion to assist their claims estimation process and to assess any physical barriers to viewing the site.

What they did: Geospatial Insights accessed and analysed satellite imagery from immediately before and after the explosion, highlighting damaged points of interest (e.g. damaged vehicle storage).

Impact: Within 48 hours, Geospatial Insight was able to identify and map the blast and resulting chemical damage, enabling accurate loss estimation predictions well before loss adjusters could access the site.

The Oxbow Partners view

Despite concerted efforts by insurers, the quality of information received by underwriters about building characteristics is still poor. Companies that can cheaply but accurately enhance this data will be in high demand for some time to come.

Second, we believe that aerial analytics should now be part of any insurer's major event response strategy. The benefits include timelier information (benefiting both insurers and policyholders) and cheaper recovery efforts as adjusting resource can be allocated more intelligently.

Hokodo allows online platforms and B2B marketplaces to distribute insurance products to SMEs

Hokodo is an MGA which designs commercial insurance products for sale via seamless integration into web platforms already used by businesses. These businesses might be invoicing and accounting packages or trading marketplaces. By integrating Hokodo's APIs into their own customer journeys, partners can offer products at the point where customers are likely to be considering insurance.

Hokodo's first product is a single invoice protection policy to be offered through accounting packages and other supply chain networks. Hokodo's data science team has developed its own credit risk models to offer this product.

Goods in transit protection is another area that Hokodo has in its sights. Insurance could be sold at the point of purchase through a B2B marketplace (such as Amazon Business) or a shipping platform such as FedEx. Purchasers often believe (incorrectly) that the seller or freight forwarder automatically insures shipments.

HOKODO

Company summary

Year founded: 2017

Underwriting capacity: Channel Syndicate, a unit of SCOR Global P&C

Active in: UK, Europe from 2019

External investment: Announcement forthcoming

Latest round: Announcement forthcoming

Main investors: Announcement forthcoming

Notable individuals: Louis Carbonnier, Co-Founder & Co-CEO: Former Founder and CEO of Euler Hermes Digital Agency
Richard Thornton, Co-Founder & Co-CEO: Former Group COO, Aspen

Case study

Client situation: Centrifuge is a platform which enables businesses to exchange financial documents such as purchase orders, invoices and company data on the blockchain. Centrifuge would like to enhance its client offering by providing trade credit insurance at the point of sale to its clients.

What they did: Hokodo gave Centrifuge access to its APIs. When a business uses Centrifuge's platform they can now choose to insure a specific invoice. In time Hokodo could automate claims payments as insolvencies are easily verifiable on the Centrifuge blockchain.

Impact: Centrifuge benefits from the partnership by being able to offer additional services to its clients. This improves both Centrifuge's profitability and the client experience.

The Oxbow Partners view

It is increasingly common for SMEs to use cloud-based systems, for example for accounting, HR or CRM. It is easily imaginable that these platforms will become the 'gatekeepers' to SME customers for other services like insurance, as we describe in section 2 of this report.

For those who doubt the 'digital affinity' proposition, Zhong An provides a useful proxy. The Chinese insurer sold £1bn of GWP in its

first three years of operation, trading through affiliates such as Alibaba and other Chinese platforms.

Whilst Hokodo itself is in the early stages (it is launching in H2 2018) we believe that the insurance experience and tech vision of its management team make it a force to be reckoned with.

Insurdata helps (re)insurers improve the quality of risk and exposure data that is used across the value chain

Insurdata technology is used by insurers and reinsurers to develop and augment building-level risk and exposure insight. Insight is generated through proprietary data augmentation methodologies. The technology works globally and has to date been used to augment client exposure data in 84 countries.

Insight is available from point of underwriting to portfolio management. Additional services include generation of 3D property-specific models.

Information created using Insurdata technology has a material impact on exposure management and modelled loss estimates, impacting pricing, underwriting, portfolio management and risk transfer.

Insurdata's mobile and desktop technology is blockchain-enabled and is available through APIs.



Company summary

Year founded: 2017

Insurance clients: SCOR, Baloise

Active in: Europe, US

External investment: \$1.3m

Latest round: \$1.3m (Q4 2017)

Main investors: Menlo Ventures, Anthemis, Plug and Play

Notable individuals: Jason Futers, Co-Founder & CEO: ex RMS, 20 years of risk management experience
Jeremy Sterns, Co-Founder & CTO: ex Microsoft, entrepreneur

Case study

Client situation: SCOR wanted to assess how high-resolution exposure information available at original point of underwriting could inform the underwriting process and how changes in that information would impact pricing, underwriting and portfolio management decisions.

What they did: Insurdata analysed and augmented geocoded information provided by SCOR for a sample of properties in Florida using the Insurdata Exposure Engine.

Impact: Comparing the augmented datasets with the original information revealed that 44% of buildings had incorrect geographic identifiers and that 87% of properties were displaced by up to 25 metres. Comparing the original centroid annual average loss (AAL) to perimeter AAL saw 22% of locations change by at least 5%.

Case study

Client situation: A client wanted to understand the impact of high resolution, accurate exposure information on its global earthquake portfolio.

What they did: The client commissioned a consulting project to assess a subset of its portfolio, including the US and multiple countries in Asia. Insurdata assessed the risk using augmented exposure information, Digital Evaluation Model and soil data.

Impact: The client has a much deeper understanding of its portfolio, including the volatility of hazard data and potential loss estimates.

The Oxbow Partners view

Insurdata's early pilots have generated results that have a material impact on (re)insurers' underwriting. As long as the industry's input data is of variable quality – something that is unlikely to improve soon as much of the data comes from policyholders' own internal data

on locations, which has not necessarily been collected for insurance purposes – companies like Insurdata will perform a useful role. We believe that Insurdata, with its experienced management team, could become a critical industry 'utility'.

McKenzie Intelligence Services provides intelligence to allow insurers to respond to catastrophe events

McKenzie Intelligence Services (MIS) helps (re)insurers quantify losses shortly after catastrophe events have occurred. MIS creates a matrix from high-quality satellite imagery and other sources such as CCTV, flood and wind sensors and allows (re)insurers to overlay their portfolio.

This allows MIS to give (re)insurers an estimate of their loss within hours of the event and allows loss reserving to be significantly more accurate and not reliant on models. MIS also creates a timeline of how losses develop over the first 168 hours. Certain losses can be assessed and settled without the need for on-the-ground loss adjusting.



McKenzie Intelligence

Company summary

Year founded: 2011

Insurance clients: LMA, various managing agents

Active in: UK, USA

External investment: None

Latest round: N/A

Main investors: N/A

Notable individuals: Forbes McKenzie, Founder & CEO: 9 years Army Intelligence Corps

Case study

Client situation: A commercial insurer was aware that 19 very large private properties (with a total insured value of \$95m) were at risk during a wildfire event in California in 2017.

What they did: MIS plotted the location of the properties and fire and immediately determined that only 6 of the locations could have been affected by the fire. These properties were then inspected and positively confirmed as destroyed.

Impact: Claims relating to the 6 properties were settled immediately and the insurer did not have to deploy any resource against the other 13. Lengthy physical adjustment was avoided and the insurer delivered excellent service for its high net worth clients.

Case study

Client situation: Lloyd's of London (re)insurers experienced multiple catastrophic losses during the 2017 Atlantic hurricane season. Underwriters could not quickly determine the size of their potential loss as US federal airspace was closed, limiting the use of drones and movement of loss adjustors.

What they did: MIS overlaid satellite images onto (re)insurers' exposure data to visualise claims and help underwriters with loss estimates.

Impact: Underwriters had a clear initial picture of the loss and were able to align resources accordingly. This reduced demand for loss adjustors and significantly reduced cost. Insurers were able to provide the stock market with clear guidance on losses and protect their share prices.

The Oxbow Partners view

Technology allows insurers to take a more structured approach to catastrophe claims. Rather than running the same process for all locations, technology can allow insurers to intelligently triage based on a rapid, technology-led assessment. This reduces opex, both in terms of internal resources and external adjusting spend. Customer satisfaction is also increased as claims do not

back up as much as they would otherwise do after a catastrophic event.

MIS is particularly interesting as it is positioning itself as a market solution. The Lloyd's market has a track record of cooperating on certain activities, notably claims settlement. MIS may represent the first of a new generation of tech-led functions that could become a market solution.



MGAM is a digital MGA which allows incumbents to trade in the digital economy

MGAM is a digital MGA that offers an electronic full-service binding authority system. The system comprises a tailored bordereau data management solution, coverholder management system, comprehensive reporting platform and an insurance broking accounts system. The business also employs underwriters able to construct products and rating models.

MGAM has two main customer groups. For carriers, MGAM's platform can allow portfolios to be administered more cheaply, or facilitates 'connectivity' to the digital economy. For InsurTechs, MGAM can function as a product platform, both creating the product and sourcing capacity from the market.

Company summary

Year founded: 2016

Underwriting capacity: Builders Direct, Aspen Risk Managers

Active in: UK

External investment: £800k

Latest round: £800k (Q4 2015)

Main investors: Private investors

Notable individuals: Jason Anthony, Founder and CEO: Underwriter and MGA professional with 30 years' market experience

Case study

Client situation: An InsurTech serving the sharing economy was looking for an insurance solution to cover on-demand public liability for UK cycle couriers.

What they did: MGAM built a pricing model to price public liability insurance on an hourly basis using both client and market data.

Impact: The client integrated the MGAM pricing model into their application process and provided the product. MGAM's solution is completely tech-based and acquisition costs were nearly 50% lower than traditional broker distribution models. This business model is now being rolled out to other shared economy product lines.

Case study

Client situation: Client situation: A commercial insurer wanted to transfer a £10m book of business from their own operations onto a lower-cost MGA platform.

What they did: MGAM worked with the client to transfer the whole portfolio including the underwriting and rating guide.

Impact: MGAM were able to process the book, including the provision of compliance and regulatory reporting, bordereau and IBA accounting services. This enabled the client to concentrate on managing their distribution and did not have to be concerned about bordereau administration.

The Oxbow Partners view

There is evidence in the market of insurers being more open to either 'outsourcing' the administration of portfolios or choosing niche policy admin systems to complement their core system, especially for innovative or experimental product lines.

MGAM is a business that can help with this process. Nonetheless, insurers should ensure that they have the right balance of focus between improving their own legacy technology and exploring third party solutions for specific lines or business, portfolios or geographies.



Nimbla is an MGA that links to cloud-based accounting platforms to provide single invoice insurance for SMEs

Nimbla allows businesses to insure against default on individual invoices. Business owners connect Nimbla to their online accounting platform to see invoices in their Nimbla account. Nimbla then displays the price to insure each individual invoice, which users can choose to take up or not, as well as a range of other analytics.

Nimbla is planning to introduce other commercial insurance products in the future.

Company summary

Year founded: 2016
Underwriting capacity: Munich Re
Active in: UK
External investment: £1m
Latest round: £650k+ (Q3 2018)
Main investors: Techstars, Barclays
Notable individuals: Flemming Bengtsen, Founder & CEO: Former Risk COO at SwapClear
 Chris Butcher, NED: CEO of Ambant Underwriting Services

Case study

Client situation: A furniture manufacturer operating on a pro forma basis received an offer for an unusually large order, but with a request for extended credit terms. The customer was another SME and a default would have been disastrous for the seller.

What they did: SMEs could historically only purchase whole turnover insurance cover. This is a sub-optimal solution for many SMEs who often have single invoices that they wish to insure.

Impact: The seller purchased single invoice insurance and was able to win the order.

Case study

Client situation: An SME lender has an online platform where clients get short-term cashflow through invoice discounting.

What they did: Nimbla provided trade credit insurance to the lender by directly integrating its API to the lender's systems.

Impact: The lender could offer bad debt protection as part of their proposition and also improve the scope and terms of their loan underwriting. The lender could also offer a wider range of coverage and improve terms such as raising advances from 80% to 90% of the invoice amount.

The Oxbow Partners view

In section 2 of this report we highlight the changing dynamics in SME distribution. In short, the 'buying point' for many SME insurance products is likely to shift from a stand-alone insurance journey (i.e. broker or direct insurer, whether online or offline) to a journey integrated into 'gatekeeper' platforms.

Successful insurance partners will need to integrate seamlessly into these platforms, both in their use of data and customer experience. We think tech-led distribution platforms are well placed to perform this role and will be the connection between distribution and capital.

Pharm3r is a healthcare analytics platform that offers unique insight to pharma liability underwriters



Pharm3r uses machine learning and artificial intelligence to collect, clean, aggregate and process data on the life sciences industry. Information on drugs, devices, clinical trials and physician outcomes is collected to create an industry database that can be used for a variety of insurance-related purposes.

Pharm3r's technology allows liability insurers to quickly detect, predict and price litigation risk. For example, an underwriter can see the number of adverse events reported for a drug or they can compare product problems associated with thousands of medical devices. Underwriters can also monitor their existing book of business by using Pharm3r as an exposure management tool.

Risk selection and pricing is assisted by Pharm3r's software by showing up-to-date life sciences industry information and producing a risk score for selected medical devices or drugs.

Company summary

Year founded: 2011

Insurance clients: Chubb, Somo, LifeScienceRisk, OneBeacon

Active in: USA, Canada

External investment: None

Latest round: N/A

Main investors: N/A

Notable individuals: Libbe Englander, Founder & CEO: Science PhD-turned healthcare hedge fund investor turned entrepreneur

Case study

Client situation: A product liability insurer wanted an accurate assessment of the probable maximum loss that its portfolio would sustain.

What they did: Pharm3r used its database and risk scoring tool to analyse correlations within the client's portfolio. The resulting exposure analysis was then applied to the client's portfolio taking into account policy terms and conditions.

Impact: The insurer could pinpoint products and companies of outsize influence and measure the effect on the portfolio of different regulatory assumptions. Pharm3r was able to create an exposure management tool for liability insurance, which can be used in the same way as RMS and AIR are used by property insurers.

Case study

Client situation: An insurer requested a comprehensive review of its medical device portfolio to identify any risks that presented liability potential outside its risk appetite.

What they did: Pharm3r reviewed medical device manufacturers' product lists and ranked them by risk score. The application showed that despite a recall, one manufacturer's re-released product continued to exhibit the same design flaw, causing serious patient injury and that risk signals were accelerating.

Impact: The insurer reduced its exposure to this company, avoiding a multimillion loss when litigation started soon after. At the same time, the insurer was able to identify better risks among products used to treat the same medical diseases. This experience prompted a review of underwriting procedures and the insurer made the use of Pharm3r's PandoraPlus™ product mandatory.

The Oxbow Partners view

We see new databases like Pharm3r as transformational in liability underwriting. Underwriters can use them to base decisions on exposure insight rather than (backwards-

looking) claims experience and subjective judgement. Companies like Praedicat and Arium have already proved that there is value in new areas of risk assessment.

RightIndem provides a front-end digital self-service claims platform

RightIndem is a digital claims platform that supports all classes of insurance from commercial marine to personal motor. It is a white label solution which insurers, brokers and service providers can use to deliver a digital claims experience for their customers.

RightIndem has several modules for different parts of the claims journey. At eFNOL stage, policyholders can submit a voice and video recording instead of running through a long script. At the analysis stage, algorithms screen for fraud and speed up legitimate payments. At the repair or payment stage, the system guides customers through their options and offers transparent insight into how the settlement figure has been calculated.

Benefits to insurers are felt as reductions in both expense ratio and loss ratio and improvements in customer satisfaction.

RightIndem's platform is offered on a SaaS basis and uses APIs to make it easy to integrate with an existing claims platform. Insurers using the system can also access and integrate a range of third-party digital tools, such as estimatics and repair/reinstatement.



Company summary

Year founded: 2016
Insurance clients: XL Catlin
Active in: UK, Europe, US
External investment: £2.2m
Latest round: N/A
Main investors: Business Angels, Angel Syndicates, NN Group
Notable individuals: David Stubbs, CEO: Entrepreneur & auto expert
 Oliver McGuinness, CCO: Claims Strategy & InsurTech

Case study

Client situation: A motor insurer wanted a tool to digitise total loss claims and reduce manual claims processing costs.

What they did: RightIndem implemented their digital total loss module enabling a digital total loss claim process.

Impact: Retention of customers using the total loss process improved by 62% compared to those using the traditional process and the client realised an opex benefit of more than £116 per case due to an increase in processing speed.

Case study

Client situation: A global marine & aviation carrier wanted to digitise their marine claims journey.

What they did: RightIndem implemented a bespoke eFNOL module that allowed brokers and customers to report and self-manage claims in multiple geographies across the world.

Impact: Operating expenses have fallen with brokers and customers servicing their own claims. Claims cycle times have fallen across the portfolio.

The Oxbow Partners view

We believe that (re)insurers can unlock considerable value from reviewing their claims operations. As we note in section 2 of this report, this is a combination of traditional levers (e.g. reviewing TPA relationships), efficient claims segmentation predicated on data-driven insight and realising technology opportunities. Advantages are expense ratio and loss ratio

improvements as well as better customer outcomes.

RightIndem is one of a handful of claims InsurTechs. Whilst its background is in personal lines P&C, the platform is now used in marine. This shows how the technology opportunity cuts across the full spectrum of claims, including both direct and intermediated channels.

Shepherd provides risk analytics for property management and insurance

Shepherd provides hardware (i.e. sensors) and a platform for facilities managers to monitor buildings to spot problems and compliance issues. Shepherd's products cover issues ranging from Legionella disease compliance to preventing equipment failures which would otherwise 'snowball' into escape of water or breakdown incidents, stopping losses before they become material.

Using Shepherd's platform, insurers gain a deeper understanding of risk, allowing them to tailor policies to client needs. They can offer new products and services, combining the risk management services facilitated by Shepherd with both a traditional or parametric insurance product.



Company summary

Year founded: 2015

Insurance clients: Aviva, Tokio Marine Kiln

Active in: UK

External investment: £1.5m

Latest round: £650k (Q3 2018)

Main investors: Founders Factory

Notable individuals: Will Brocklebank, Founder & CEO: Serial entrepreneur

Case study

Client situation: Insurers exclude Legionella risk because it is impossible for them to provide cover solely based on periodic human checks of the property's water system, where the disease could develop if certain conditions are not met.

What they did: By integrating Shepherd's technology which monitors water systems continuously, a global insurer was able to provide preferential terms for Legionella cover. Insurance is offered in conjunction with a compliance partner as a managed service. Shepherd's Risk Scorecard allows underwriters to be informed through monthly reports and real-time dashboards on how the insured's risk profile is developing.

Impact: This is the only specific and comprehensive cover available to the 100,000+ UK business that are legally obliged to control this health compliance issue. The insurer was able to grow premiums and profit in a new category.

Case study

Client situation: One of the world's largest insurers wanted to improve the service proposition and loss ratio on its commercial property book. Following significant claims they wanted to introduce tools to help clients manage risks more effectively

What they did: The insurer had trialled Shepherd's technologies in their own office buildings and discovered that disruption and downtime were reduced during cold weather. The insurer began to recommend Shepherd's services to their commercial clients. Shepherd is now assisting the clients' internal and external maintenance teams to better protect assets while passing risk-relevant data back to the underwriters.

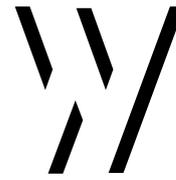
Impact: The insurer has seen that retention rates and client satisfaction have increased as well as visibility of the risk. In addition, clients have realised significant internal benefits in operating behaviours and costs.

The Oxbow Partners view

Insurers will be able to deliver new propositions off the back of the 'data revolution' through partnerships with InsurTechs, and Shepherd (along with some other companies covered in this report) is a good example.

We see huge opportunities for insurers. The challenge will be to determine with which

companies to partner as inevitably there will be more opportunity than resource. It will also be interesting to see to what extent InsurTechs remain accessible for incumbents, either because they enter into exclusive partnerships or because they ultimately end up becoming MGAs, pursuing distribution themselves and using the insurance market only for capacity.



WHITESPACE

Whitespace is a digital placement platform for the London Market

Whitespace is a digital placement platform tailored to the needs of the London Market. Word and PDF documents are transformed into universally readable digital contracts, reducing transactional and processing costs.

Whitespace's solution does not change the way the London Market places business. Instead it augments the existing process with an electronic platform. Brokers, insurers and policyholders can monitor the progress of the placement and can review any changes made to the contract. A comprehensive set of APIs allows Whitespace's platform to be integrated with an insurer's existing systems.

In the future Whitespace intends to expand its offering by introducing digital premium settlement and claims services.

Company summary

Year founded: 1985; new strategy in 2014

Insurance clients: Various London Market carriers and brokers

Active in: UK

External investment: None

Latest round: N/A

Main investors: N/A

Notable individuals: Marcus Broome, Director: Digital insurance practice leader
Jody Wilkinson, Manager: Digital insurance product specialist

Case study

Client situation: The London Market Target Operating Model (LM TOM) project wanted to determine whether a Market Reform Contract (MRC) could be made digital. A digital contract would have to be convertible from MS Word into a universal data format and be easily editable by multiple parties.

What they did: Whitespace and LM TOM carried out a successful proof of concept working with brokers and carriers. (Re)insurance contracts in MS Word were digitalised, shared and collaboratively edited.

Impact: Proof that Whitespace's technology could create and execute digital contracts showed that LM TOM's goal of one-touch data was possible. This was one of the first steps towards digitalising the way the London Market does business.

Case study

Client situation: Following the LM TOM proof of concept, a consortium of London Market carriers and brokers wanted to work with Whitespace to understand how it could help risks to be placed digitally in the market.

What they did: The consortium worked with Whitespace through a number of scenarios of increasing complexity. Risks were placed through the platform and Whitespace were able to improve the technology based on user feedback.

Impact: The proof of concept is ongoing. Following positive feedback from consortium participants, Whitespace has submitted an application to Lloyd's to become a recognised electronic trading system.

The Oxbow Partners view

Whitespace has produced a platform that facilitates the interactions of the market through technology through an intuitive and pleasant user front end. This is a rare combination for enterprise technology, especially insurance technology.

The challenge for Whitespace will be to generate critical mass on its system. A trading

platform is, of course, only as good as the parties on it. Many tech businesses have not managed to create the impetus to switch despite superior technology to incumbent solutions.

With the focus on e-trading in the Lloyd's and London Market, Whitespace could be in the right place at the right time.

5. WHERE TO GET MORE HELP

Managing agents are fortunate to be able to turn to several organisations who can help them take practical actions off the back of this report. We encourage managing agents not to wait for the future but to help shape it by actively engaging with the market, market organisations and advisors.



The LMA strives to both represent and assist managing agents on a variety of subjects including innovation. The LMA Academy runs a series of learning events relevant to InsurTech including Emerging Technology masterclasses. Through its sponsorship of InsTech London, employees of managing agents are able to attend monthly InsurTech events for free. The LMA is also supporting the market's engagement with the Lloyd's Lab. If you would like to get involved please contact peta.kilian@lmalloyds.com, see our website (www.lmalloyds.com) or follow us on Twitter (@LMAupdates).



Lloyd's has just launched its very first innovation accelerator, the Lloyd's Lab. We're opening our doors to tech talent, asking them to help deliver innovative solutions to some of the key challenges the Lloyd's market faces and make a real impact on the market's performance in a fast-track fast-fail environment. Applications for the second Lloyd's Lab cohort will open later this year for an early 2019 start. More details will be announced in due course. Please visit www.lloydslab.com for the latest news and updates or email innovation@lloyds.com.



Instech London curates a community of over 3,000 members interested and involved in innovation in insurance. We act as an innovation dating agency, linking members with like-minded folk, helping entrepreneurs find funding and capacity, and matching solutions to problems. Sign up to our newsletter for regular updates on our activities and those of our members or better still attend one of our regular evening events. For further information see www.instech.london or contact Robin Merttens (robin@instech.london) or Matthew Grant (matthew@instech.london).



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