Oxbow Partners 2018 INSURTECH IMPACT 25

ISURTECH

25 emerging technology-led partners businesses well placed to have an impact on the insurance industry in 2018

About Oxbow Partners

Oxbow Partners is a management consultancy serving exclusively the insurance industry.

We work on strategy and transformation, digital and M&A topics in general insurance, life insurance and pensions.

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.

Disclaimer & copyright

Much of the information contained in this report was collected from InsurTechs and has not been independently verified by Oxbow Partners. We therefore assume no responsibility for the accuracy or completeness of such information.

Please note that this report is for information only and it is not intended to amount to advice or any form of recommendation on which you should rely. You must obtain professional or specialist advice before taking, or refraining from, any action on the basis of the content of this report.

Copyright © Oxbow Partners Limited 2018. The reproduction of all or part of this report, or the use of the Oxbow Partners InsurTech Impact 25 logo, without the written permission of Oxbow Partners, is prohibited.

Thanks

Oxbow Partners would like to thank InsurTechs selected for inclusion in the Impact 25 for their considerable efforts providing information about their businesses.

InsurTech Impact 2019

If you believe that your business should be considered for the Oxbow Partners InsurTech Impact 2019, then please let us know by emailing impact25@oxbowpartners.com.

@oxbowpartners



www.linkedin.com/company/ oxbow-partners-consulting



www.oxbowpartners.com www.oxbowpartners.com/blog

Contents

We	Icome	2
1	Introduction	3
	Fords vs. Tinchers: Why we created the InsurTech Impact 25	3
	A note on the selection of Members	3
	The challenges of engaging effectively with emerging technology-led businesses	4
	The consequences of not engaging	4
2	InsurTech update: Q1 2018	5
	The InsurTech landscape	5
	2018: A transition year from hype to impact	5
	Clustering – and the need for careful diligence	6
	Increased participation by incumbents	6
	Headwinds for InsurTech	7
	The failure to engage: Collaboration back to competition?	8
3	Succeeding with InsurTechs	10
	Culture through structure and space	10
	Scalable start-up infrastructure	11
4	Executive checklist	13
5	The InsurTech Impact 25	14

Appendix: Methodology for choosing the InsurTech Impact 25

Impartiality and objectivity

Impartial and objective analysis is a core principle of Oxbow Partners.

All Members of the Oxbow Partners InsurTech Impact 25 were selected on their own merits. No Member has paid a fee or offered any other financial incentive, directly or indirectly, to be included. The methodology that we used to choose Members is shown in the Appendix.

1

Welcome

InsurTech emerged as a term only in mid 2015. Since then, it has burst into the insurance mainstream and is now a recognised term in the industry. Commentators talk about there being around 1,000 InsurTechs – although this number is highly sensitive to the definition. What is certain is that there are hundreds of emerging technology-led businesses which could be relevant in the coming years.

The consequence for industry executives is a torrent of InsurTech news and direct approaches from founders promising to do unimaginably good things for their businesses.

But which InsurTechs are well placed to have an impact; which InsurTechs should executives be talking to?

Since we started covering InsurTech on our blog (www.oxbowpartners.com/blog), we have taken an analytical, sober view of the likely impact of InsurTech as a whole, and of individual InsurTech companies (through our `Bitesize' profiles). Whilst we are excited by the potential of technology to transform the industry, we are also mindful of the challenges that technology companies need to overcome to be successful.

For insurers and brokers this means that InsurTech could be a 'game changer', but only if they back the right horses.

In this report, Oxbow Partners has identified 25 InsurTechs which we believe are well placed to impact the insurance industry in 2018.

We hope you find the report valuable in navigating the InsurTech landscape. Please contact us at impact25@oxbowpartners.com if you would like to get even more insight into our views now and as 2018 develops.

Stuart Davies Chairman, Oxbow Partners

Introduction

Fords vs. Tinchers: Why we created the InsurTech Impact 25

It's one thing spotting a trend, but quite another playing it profitably.

Visionary investors may have seen potential in the automobile in the early 1900s. But those who invested in the Tincher, a premium car that hit speeds of over 60mph by 1907, did not gain financially: the business went bankrupt in 1909. The winners were, of course, those who spotted the Ford, which launched the same year.

The parallels to InsurTech are clear. There are no prizes for spotting InsurTech as a trend. There are no prizes for implementing more proofs of concept than your competitors. The only prize is for those who spot the winners, are able to attract them, and engage effectively and profitably with them.

But who are the winners? Depending on who you believe and how you define InsurTech, there are currently around 1,000 InsurTechs.¹ Insurance executives have a tough time navigating the landscape.

Industry commentary does not, in our opinion, help executives much. Reports highlight the large number of InsurTechs, their diversity and creativity. Articles reinforce the hype and don't analyse the potential impact.

We created the InsurTech Impact 25 to highlight specific companies which we believe are well placed to impact the European insurance industry in 2018. We believe that European insurance executives should know all of these companies and be talking to many of them.²

A note on the selection of Members

We had hoped that a 'hard' metric such as revenue growth would serve as an objective selection criterion for Membership of the Impact 25. This was not possible because InsurTech is such an embryonic category: revenue growth numbers ranged from infinite (many companies had no paying customers in 2016) to absurd (some had tiny revenues in 2016 but got some major projects in 2017), to understated (some had material revenues in 2016 and are arguably more established than other companies, but showed lower revenue growth).

We have described our selection methodology in detail in the Appendix. In summary, Members needed to meet most of the following criteria:

- Minimum £100k recognised European revenue in 2017 from insurance clients
- Maximum £10m recognised global revenue in 2017 from insurance clients
- Established before 1 January 2017, but after 1 January 2007
- For companies operating mostly outside Europe, evidence that there is a plan to focus on Europe in 2018
- A proposition that is technology-led and somehow innovative
- A shareholder structure that means the company is operationally independent of any major corporate

We conducted significant analysis of each Member in the selection process but our choices were ultimately mostly subjective.

Crucially, there is no fee or other financial incentive for Membership (and there will never be one). All Members were selected on their own merits.

We have no doubt that we have missed some Fords and included some Tinchers. But who ends up a Ford and who ends up a Tincher is not pre-determined. The fate of most of the Members lies in the hands of insurers and their willingness and ability to trial and then implement their technology. That is driven not only by the quality of the individual InsurTech but also by unforeseeable factors such as industry priorities and someone getting the lucky 'big break'.

¹For example, do you include fraud analytics businesses that have cross-sector application like Feature Space; what about established insurance technology companies like Acturis or Guidewire? Some of the former are often included whilst the latter are normally excluded.

²Clearly not all Members of the Impact 25 are relevant for all types of company.

The challenges of engaging effectively with emerging technologyled businesses

Spotting the winners is just the start: it's what happens next that matters.

In 2016 we released a short report³ about the challenges InsurTechs experienced engaging with insurers. These included: a tendency by insurers to show great interest in an InsurTech but be distracted when a short-term revenue opportunity arose; a lack of creativity in the solutions insurers were able and willing to offer InsurTechs; and slow decision-making processes.

In 2018, these issues have only partly been resolved. We still see many insurers taking a long time to implement proofs of concept, for example. The innovation team may move at speed, but is quickly slowed down by governance processes such as procurement and data privacy. Pilots regularly take over 6 months to run – a painfully long time for InsurTechs. The number of production-level implementations is still low (but ticked up in Q4 2017).

Insurers and brokers need to address these challenges. Only a few have managed to date: Euler Hermes Digital Agency and Digital Partners at Munich Re are two stand-out examples (profiled later in this report). The response requires both clarity of purpose and execution excellence.

Many other companies have set up innovation infrastructure – 'labs', 'studios', corporate venture capital arms and so on. However, most have not had the impact that Euler Hermes and Munich Re have achieved. As we describe in section 3, successfully engaging with InsurTechs involves both cultural change and 'startup grade infrastructure'.

The consequences of not engaging

Some industry executives might argue that engaging with InsurTech is optional, pure hype. We agree on a semantic level, which is why the title of this report refers to `emerging technology-led businesses'.

Semantics aside, we believe that engagement is essential. Executives need to set up their organisations to identify the Fords and engage successfully with them. Our argument rests on the following observations:

- Some technologies (e.g. robotics) are already having a demonstrable impact on the economic performance of businesses. Few dispute that cost will be a key theme for insurers and brokers in the next 5 years, and insurers who are unable to raise productivity will suffer. Impact 25 Members that raise productivity through robotics are Cognotekt, Kryon and RiskGenius.
- We are already seeing that the leading InsurTechs are becoming more selective about who they work with. This will lead to anti-selection for insurers who lag: they will see `normal' volumes of InsurTech engagement but won't realise that they are working with the Tinchers.
- InsurTech has 'pivoted' from distribution businesses (competing against insurers and brokers for customers) to supplier businesses (selling services to insurers). If insurers and brokers do not engage with these Service InsurTechs, startups could revert to competing against incumbents (e.g. through technology-led MGAs supported by alternative capital). Arguably this trend has already started with the emergence of 'full stack' InsurTechs such as Coya, Ottonova, ONE and Element in Germany.

Insurers need to look beyond the hype and identify the Fords. We expand on our observations in section 2.

2 | InsurTech update: Q1 2018

The InsurTech landscape

The key to understanding InsurTech is to remember that the term covers two fundamentally different types of business.

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 operate in three main areas, shown in our illustration below. They require insurers, reinsurers and brokers as customers.

The following picture shows the InsurTech Impact 25 Members along the value chain.

Distribution	Data & Analytics	Operations	Claims & Fraud
BOUGHT BYMANY GUARDH©G wefox GROUP	Atidot	Cognotekt INSTANDA KASKO Viskgenius	Shift.
Figure 1: The InsurTech Impact 25 across the value chain	However, consumers and		-
2018: A transition year from hype to impact	Over the last two years, e in many cases, been satis understood that innovativ activity.	fied with innovation activity and n	deas and opportunities. They have, ot demanded to see results. They that you can't have results without
Shift to execution and results	Boards have heard much seen little evidence that t the long-term to 12-24 mo	a about the power of InsurTech to ` his is happening. We expect the n onth P&L impact.	portunities to execution and results. adisrupt' the industry since 2015, but hanagement horizon to shift from ns: expect engagement with data
	Some insurers will continue this to be in the form of ce illustration of Allianz X, wh	ocess automators and digital adm e to focus on distribution and prop apacity provision to InsurTechs ratt ich announced in November 2017 ategic digital investment firm'.	position innovation ⁴ but we expect her than in-house innovation. An

⁴Insurers have innovated with distribution and innovation for centuries, of course. In this context, we use innovation to refer to `disruptive' innovation, for example the development of untested distribution models (e.g. Zego) or products (e.g. Neos).

2 InsurTech update: Q1 2018

Greater focus on strategic themes

Second, we think that innovation activity will focus on strategic themes. Since 2015, some companies have built sprawling innovation teams, for example corporate venture funds, 'startup studios' and in-house innovation teams. These units have generally worked independently and focused on those opportunities they perceived to have most value. These opportunities were often inconsequential to the multinational groups within which they operated.

In 2018, we think there will be greater top-down management of innovation to align it to group objectives. Allianz X again serves as a good example: its investment activities will focus on five 'ecosystems'⁵. Similarly, AXA recently announced that it is bringing several of its innovation units (e.g. AXA Strategic Ventures, the venture capital business, and Kamet, the 'startup studio') into a single innovation reporting line.⁶ In this way, these groups hope to build differentiated capability in areas that are material to the group.

Clustering – and the need for careful diligence

An interesting feature of InsurTech at the moment is the clustering around certain themes. For example, Carpe Data, Cytora and Digital Fineprint all provide services around the provision and analysis of data; 360Globalnet, Cognotekt and RightIndem support the delivery of digital claims experiences.

Clustering is a natural progression in the lifecycle of InsurTech: it is to be expected that companies should cluster around ideas that are gaining traction when the industry is moving from hype to impact. For insurance executives, it means that careful diligence of each InsurTech is required to understand and identify the Fords and avoid the Tinchers within each category.

Increased participation by incumbents

Figure 2: Insurers and reinsurers involved in Impact 25 companies, split by investment

and capacity partnerships.

The comments above presuppose that companies have been involved in InsurTech and innovation at all. It is important to note that activity has been skewed to a number of large insurers and reinsurers so far. The chart below shows which insurers and reinsurers have publically engaged with Impact 25 distribution startups.

	Allianz	Aviva	Hiscox	Munich Re	Others
BOUGHT *	C			C I	C
GUARD H@G			C		
neos				0	
GROUP T					
		C		C	С

C Capacity

Investment

Company names refer to the groups, not necessarily legal entities. For example, Munich Re generally invests via its Hertford Steam Boiler operation.

* Others include Penn Underwriting (Argo / Covea), Ergo, L&G †Munich Re capacity and investment is in ONE, wefox's insurance carrier

‡ Others is Transatlantic Re

Munich Re has been extremely active in the InsurTech space, both through Digital Partners and its core business. Other incumbents have been more opportunistic or restrained.

We expect more companies to become active in 2018. This is facilitated by the trends above: no longer is an investment in InsurTech or innovation a 'hype' investment but it is an opportunity to make a real impact either to customer engagement or operational efficiency.

⁵These are mobility, connected property, connected health, wealth management & retirement, and data intelligence & cybersecurity; source: Allianz press release November 2017 (https://www.allianz.com/en/press/news/company/appointments/171124_Allianz-X-Change/)

"See https://www.insurancejournal.com/news/international/2017/05/17/451335.htm

Headwinds for InsurTech

A notable characteristic of InsurTech is the wide dispersion of revenue growth rates. The range for Impact 25 Members (where disclosed) is from 5% to 9,900%.

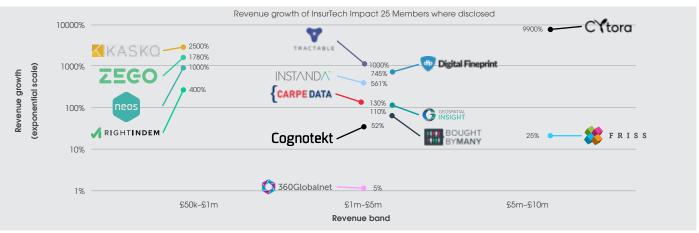


Figure 3: 2016-17 revenue growth of InsurTech Impact 25 Members where disclosed There is no correlation between our assessment of an InsurTech's traction or potential and its current revenue growth rate. There are two main reasons for this.

- We think the quality of earnings of Distribution InsurTechs is high because customers have selected a differentiated proposition and are likely to be relatively sticky. InsurTechs can create significant value without necessarily being in 'hypergrowth'.
- Supplier InsurTechs are subject to the sales cycles of corporates. Revenue is therefore likely to be both lumpy and exponential due to the `herd mentality'. Recent historic performance is not necessarily a good predictor of future impact.

Nonetheless, InsurTech faces headwinds, as the lack of 'hypergrowth' company illustrates. These are discussed in more detail below.

For Distribution InsurTechs, there are multiple challenges:

- Companies are always reliant on corporates in some form or other. Insurance is unique in the sense that the cost of the product is almost always unpredictable – either through unexpected frequency or severity of losses. As a result, every Distribution InsurTech needs to persuade an institution to back its approach; we have described the challenges of partnerships in various points in this report.
- Companies typically only have one opportunity per year to acquire customers (i.e. at their renewal date) unless they are trying to acquire customers new to insurance (which has its own challenges). This creates major challenges for InsurTechs: if you don't get the renewal in one year, most (if not all) of your 'pre-sales education' is wasted and you have to start from scratch the following year.
- If InsurTechs do not convert opportunities, this could be because they are not scratching a
 sufficiently major customer itch. Customers famously don't love their insurers, but are they
 willing to engage with potentially superior alternatives? Switching costs are high and it is
 perhaps not surprising that the Distribution / Product InsurTechs we see performing well are
 those which are either offering high-emotion products (e.g. pet insurance from Bought By
 Many) or niche products (e.g. Deliveroo rider insurance from Zego).
- Finally, aggregators (price comparison websites) are either established or growing their influence as the `gatekeepers' of insurance purchasing in many markets. There are two conditions for the aggregator model to work: first, there needs to be a set of similar products so that price comparison is meaningful; and second products need to be time-limited so that they can support annual comparison. InsurTechs focusing on product innovation often satisfy neither of these criteria meaning that they are shut out of major digital routes to market.

Standing against these challenges is the experience of our Distribution InsurTech Members. These companies are attracting and retaining customers and generating value for their partners and investors.

Distribution InsurTechs: Not scratching major customer itches?

2 InsurTech update: Q1 2018

Supplier InsurTechs: The challenges of the corporate sales cycle

The failure to engage: Collaboration back to competition?

For Supplier InsurTechs sales cycles are slow and lumpy. Complaints we hear regularly are that companies are slow to act (e.g. decision-making processes), overwhelm with bureaucracy (e.g. long NDAs, complex procurement processes) and are inconsistent (e.g. quickly changing priorities). In fact, these are very similar themes to those we heard in 2016 when we published our first study on the space. But Some insurers are now also getting better at engaging with InsurTechs (see sidebars) and we expect more to invest in their capabilities in 2018 (see section 3).

Insurers may speculate that the high marketing costs, driven partly by customer inertia, will keep Distribution InsurTech competitors at bay. They might feel that their current underwriting performance makes Supplier InsurTech partnerships optional.

They may be right - but we doubt it.

We think that a failure to engage could just move InsurTechs away from trying to collaborate with insurers and back to competing against them. The opportunity to 'disrupt' is too large for entrepreneurs and investors to ignore.

In fact, this trend has arguably already started. A number of `full stack' InsurTechs have launched in the last two years. These are digitally-led, legacy-free startup insurance companies. The most well-known example is Lemonade in the US, although several businesses emerged in Europe in 2017: Coya, Ottonova, ONE, Element (Germany) and Alan (France) for example. These companies are setting themselves up so that their reliance on the traditional insurance market is minimal; they are competing with them head-on.

What we have not yet seen is Supplier InsurTechs taking on more elements of the value chain to compete against insurers, but there is no reason why this could not happen. The scenario here would be that a company offering, for example, enhanced pricing capabilities to insurers does not get sufficient traction as a supplier to incumbents. They therefore evolve into being an MGA, possibly using reinsurance or non-standard capacity, and use their technology to select against incumbents.



Figure 4: InsurTech could go 'full circle' back to competition against insurers

We believe that insurers have much to gain from building capabilities to engage effectively with innovative technology businesses – the subject of the following section.



Arguably the most advanced proposition for Distribution InsurTechs

InsurTech was emerging as a category at the end of 2015. A few early InsurTechs had launched (mostly focused on distribution), for example Friendsurance in Germany and Bought By Many in the UK. Given the impact that tech companies were having in other industries – most obviously Uber but also less glamorous propositions such as international payment provider Transferwise and digital wealth manager Scalable Capital – the Munich Re Board wanted to ensure that it was positioned for any emerging trend.

After a brief market study (by Oxbow Partners), it became clear that Munich Re needed to do two things to capture this trend. First, it needed to build a digital product platform that could integrate with Distribution InsurTech. Founders pointed out that their customer journeys often fell down at the point of quote or purchase when customers were handed over to insurers' systems. Customers would go from a beautifully designed acquisition and development process to a grey screen; sometimes they couldn't even purchase online. This led to high drop-off rates.

Second, Munich Re needed to build a separate team if it wanted to build serious InsurTech relationships. Founders told us that they would have endless coffees with underwriters who were interested in their proposition, but would then suddenly stop getting replies to their emails. The problem was that underwriters would get distracted by short-term opportunities, and founders would discover that they were merely a person of interest, not a potential business partner.

Digital Partners is arguably the most advanced proposition in the market for Distribution InsurTechs. The fully API-enabled platform allows Munich Re to provide seamless customer journeys to its partners. Through the API `gateway' (think of this as a kind of plank-plug provided by Munich Re) these partners can flexibly choose the services they want to source from Digital Partners.

Equally, the dedicated team understands the requirements of startups. They make quick decisions, are clear about what they can offer and execute fast. Digital Partners has got over a dozen partnerships in the first 18 months of operation, including Bought By Many, Trōv, Slice Labs and Next Insurance.

3 | Succeeding with InsurTechs

In the previous sections we argued that insurers will try to move InsurTech from hype to impact in 2018 but noted that many still struggle to engage with early stage businesses. In this section we will describe what that means.

Our experience working with clients suggests that there are two areas that need to be addressed for insurers to succeed with InsurTechs: culture and scalable start-up infrastructure. The relative importance of each of these areas depends on the organisation. Some companies have entrepreneurial front-line employees who are frustrated by bureaucracy; other companies have entrepreneurial management but front-line staff who rarely look beyond 'business as usual'. As a Global COO recently commented: "I can get (back office functions) to do what I need (for innovation); the bigger problem is the business – for example for partnerships with (Distribution InsurTechs) I need to get underwriters on board and they are normally swamped by BAU."

Culture through structure and space

Culture is obviously difficult to change and insurers have tried different structural approaches to encourage it. Some have created independent teams to 'spearhead' innovation (e.g. XL Accelerate at XL Catlin, Aviva's 'Digital Garage', corporate venture funds, 'startup studios') whilst others have attached innovation resources directly into their core teams. Many of the big players have tried approaches across the spectrum.

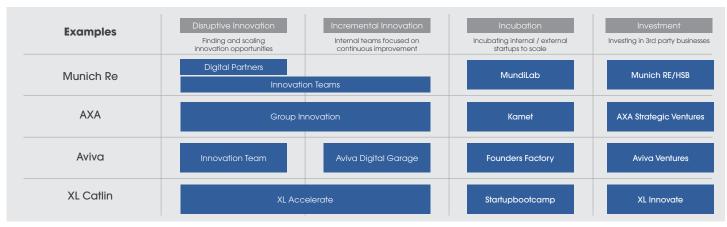


Figure 5: Examples of startup engagement structures used by selected (re)insurers

Success has been varied – as indeed has been the definition of success. For example, some insurers see investments in InsurTechs as a learning opportunity, both for the institution and for individuals who might be seconded to the portfolio company. On that measure, corporate venture is working for many; for some companies, raising awareness and driving a desire to innovate amongst staff are already significant 'wins'.

The only thing we can say with certainty is that different models have worked for different insurers.

Arguably more important than structure is 'space', by which we mean the incentives provided by companies to innovate. This could be as simple as making it easy for employees to surface improvement ideas to management. For example, Simply Business, the UK online business insurance broker acquired by Travelers for 50x EBITDA in 2017, holds regular 'non-technical hackathons' with its staff to identify and push forward improvement opportunities. Not only does this help the business, but it creates real engagement amongst employees. Other companies might choose to create space for employees to innovate through tools such as balanced scorecards.

That said, companies can push 'culture' too far. In 2017 we published an infographic making the case that insurers needed to differentiate between 'core business innovation' and 'disruptive innovation'. This was in response to the number of calls we got from employees at our client firms asking us about how to engage with startups. These people did not appear to be trying to solve any specific use case, but rather were conducting their own scouting missions. We consider that distracting for core business employees.



Our view is that most employees should focus on 'core business innovation', which we define as incremental improvement in the core business, the part of most companies that makes the money. This might involve startup partnerships, but only where there is a clear business 'pull'. For example, CUOs should always be thinking about how new sources of data could help them price risk better. Leaders should be creating 'space' for their employees to think about it – but should not deploy significant resource on opportunities that are far from the current business model.

Those opportunities should be pursued by small, specialist teams focused on 'disruptive' innovation. These teams are scouting for InsurTech partnership opportunities more broadly. Their 'space' is created through longer-term KPIs and incentive structures which make sure that they don't get distracted by the day-to-day in their mission to shape the future. Good examples are the two teams highlighted in our sidebars – Digital Partners at Munich Re and the Digital Agency at Euler Hermes. Others might include the Futures team at Hiscox or XL Accelerate.

This separation is important not only to create clarity on business objectives. It is also important for InsurTechs, who want to be certain that their engagement will be fruitful. A 'disruptive' Distribution InsurTech does not want to deal with a traditional underwriter, only to be sidelined as soon as an attractive short-term opportunity arises.

Scalable start-up infrastructure

Most insurance processes were conceived for large-scale, regulated actives, for example outsourcing agreements or major supplier agreements. It is also true that processes tend to get more complex as time goes on: companies are generally not good at reducing complexity. NDAs are a dozen pages long and excessively restrictive; procurement questionnaires regularly exceed sixty pages of detailed questions.

We are aware of one situation where a corporate parachuted an employee into the startup four days a week for several months to help them pass through the compliance gates.

Insurers need to build `startup-grade' processes. This involves, for example, considering all governance processes and separating legal requirements from company policies. Companies should decide where company policy can be varied for early-stage businesses. Functions typically captured by these considerations include legal, procurement, data privacy, information security and compliance.

There is also a need to build scalable startup infrastructure. A data sandbox is a good example. Startups often report that it is at best a lengthy process to gain access to insurers' data to conduct data proofs of concept. Insurers complain that each POC takes months to set up as frameworks and protocols need to be agreed from scratch each time. By building such a data sandbox, Euler Hermes was able to conduct 77 data POCs in its first year of operation.

Another example of innovation infrastructure is a customer beta-testing platform. This allows insurers to experiment with a subset of selected clients who know that they are receiving early offers. Sometimes insurers use employees for this purpose, but this population could lead to skewed results as it consists of more engaged, or at least knowledgeable, insurance buyers.

3 | Succeeding with InsurTechs

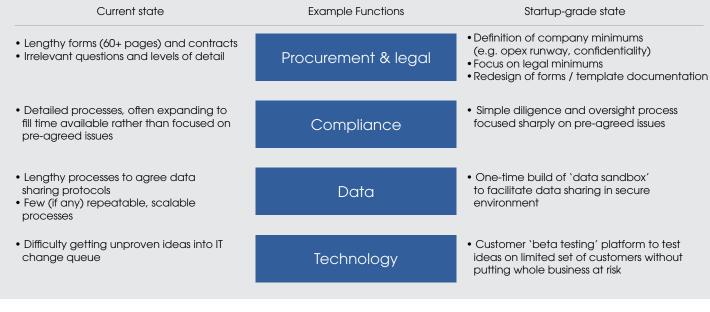


Figure 6: Current insurer processes vs. startup-grade processes It is obvious that regulated companies need to be careful about their governance: Nobody would suggest that the need to innovate outweighs the potential costs of contravening the GDPR^o. However, there is a middle ground that can be found, as forward-thinking companies like Euler Hermes have shown.

Euler Hermes Digital Agency

77 proofs of concept in year 1

Euler Hermes is a credit insurer, soon to be a fully-owned subsidiary of Allianz.

Until recently, credit insurers enjoyed enormous barriers to entry. Euler Hermes has, for example, collected credit risk information on more than 50 million companies in over 150 countries over decades. This was an onerous process – combining disparate, normally national and sometimes hard-to-access datasets such as credit bureaus, bankruptcy gazettes and so forth.

But the world is changing. SMEs are increasingly using global, cloud-based accounting systems such as Intuit/QuickBooks and Xero. These platforms will soon become the best source of up-to-date credit data for certain market segments.

Euler Hermes's management identified threats such as this but also felt that its competitive advantage was still considerable. The challenge was using its existing assets in new, smarter ways. Management created Euler Hermes Digital Agency and gave it three objectives: monitoring market trends, prototyping new business models, and being a competency centre for digital.

Euler Hermes launched the Digital Agency and started doing proofs of concept. They quickly realised that POCs were taking too long due to internal governance challenges, like everyone else. The leadership decided that an investment in infrastructure was required to create a quicker, more repeatable process; or, as the leadership call it, to increase 'porosity' with the outside world.

The team spent three months building a 'data sandbox' – a dataset that innovators could access (with appropriate permissions) to conduct data POCs. With this approach, the team were able to conduct 77 POCs in their first year – a multiple of the number that other insurers have managed.

"New European regulations governing the collection and processing of personal information of individuals within the European Union (EU); fines can reach 4% of global annual turnover.

4 | Executive checklist

The following checklist can prove useful to insurance executives to ensure that they are harnessing the opportunities presented by emerging technology-led businesses effectively:

Leadership	 Who should lead my InsurTech engagement? Where do I find them? How do I ensure they can navigate the constraints of insurance but spot the opportunities of emerging technology? What objectives am I going to set them? Should they be focused on implementing a top-down strategy or finding bottom-up opportunities? How do I measure performance?
Strategy	 Are we clear on the challenges that could affect our business over the next 5+ years? Is there consensus in the management team about these? Is there a common view about the timing of the impact of these challenges? How is the business monitoring their development and adapting the response plan? Are we clear on the possible responses to the challenges? Is there consensus in the management team about these? How are we testing that these responses are the right ones, both in terms of market appetite and our delivery capabilities?
Execution and funding	 What structures and processes do we need to implement to enable our response? Are we able to implement effective, profitable partnerships with early stage businesses? How repeatable is our process - can we make it quicker? How are we ensuring that longer-term challenges are being appropriately resourced and funded? Do our strategy and planning processes allow us to allocate investment to the things that have longer and less certain payback profiles?
Performance and investor communication	 What does 'good' look like for insurance innovation? Is the industry benchmark enough, or do we need to outperform to compete against possible new entrants? How do I assess whether my company's innovation activities are performing well? What quantitative / qualitative KPIs am I measuring and how do I benchmark these against other companies? What should I be communicating to investors?

5 | The InsurTech Impact 25

The Members of the Oxbow Partners Impact 25 have been chosen from different parts of the insurance value chain. An illustration was shown in section 2 above.

The table below shows the Members of the Impact 25 by their characteristics.

	Member	Tech Trend(s)	Target Insurance Partner(s)		Figure 7: The InsurTech Impact 25
uo	BOUGHT BY MANY			Page 16	by their characteristics
	GUARD H@G			Page 18	
Distribution	neos			Page 20	
Dist	wefox			Page 22	
	ZEGO			Page 24	
	Atidot			Page 26	
				Page 28	
rtics	CARPE DATA			Page 30	
Analy	CYtora			Page 32	
Data & Analytics	🧿 Digital Fineprint			Page 34	
Dat	FLOCK			Page 36	
	G GEOSPATIAL INSIGHT			Page 38	
	Insurdata			Page 40	
	Cognotekt	O		Page 42	KEY
	INST∧ND∧ [™]			Page 44	Tech Trends:
suo	KASKO			Page 46	Al & Data Insight
Operations	KRYON SYSTEMS	C		Page 48	
0 0	Risk genius			Page 50	 IoT Platforms / APIs
	Qqover			Page 52	Process Automation
	TRADEIX			Page 54	UBI
_	🔇 360Globalnet			Page 56	Target
rauc	🗱 FRISS			Page 58	Insurance Partners:
ns & F	RIGHTINDEM			Page 60	Commercial Lines
Claims & Fraud	Shift.			Page 62	Life insurance
Ŭ	TRACTABLE			Page 64	
		es contain the profiles of the Oxbow Par			SME
	information contained in this report was collected from InsurTechs and has not been independently verified by Oxbow Partners.			Trade Finance	



Success stories

Insurers: We would love to hear from you if you have found this report useful for identifying an InsurTech partner.

Impact 25 Members: We would love to hear from you if you have been contacted by a potential client or partner due to your inclusion in this report.



Bought By Many groups customers with specific insurance needs and offers them tailored products

Bought By Many's Members have grown by 64% over the last year to 435,000. It has recently introduced own-brand pet and travel insurance

What do they offer?

Bought By Many offers two models: a D2C distribution business where insurers are capacity providers (the core business), and a white-label platform to help insurers acquire customers more cheaply using the Bought By Many technology.

Bought By Many has analysed millions of insurance-related Google search terms to identify unmet demand or frustrations with insurance.

The company acquires (or helps insurers acquire) in these segments, places them into groups on its platform (e.g. travel insurance for cancer survivors or pet insurance), and offers them tailored products.

The business introduced own-brand pet and travel insurance in the last 12 months; it has sold over 15,000 of its pet policies since February 2017.

The Oxbow Partners view

Traction: Bought By Many has quickly established itself as one of the leading European Distribution InsurTechs. With over 400,000 members and rapid growth since its product partnership with Munich Re was established, it has demonstrated the appeal of a more tailored, personal insurance proposition.

Potential: With a strong management team and clearly differentiated proposition, we believe that Bought By Many will grow rapidly in 2018. There is evidence from the white-label model (Canada, China) that the proposition is globally scalable.

The 2018 challenge: Bought By Many still need to prove that the model scales outside the highemotion segments it is currently targeting.

Year founded: 2012

E 69

Investment to date: £12.5m

Key investors: Octopus Ventures, Munich Re

Public insurance capacity providers: Munich Re, Allianz, Argo, Covea

Revenue growth 2016-17: 110%

2017 revenue band: **£1m - £5m**

Current countries: UK, Sweden (for D2C model); Canada, China (for white-label model)

HQ: London

Tech Trend Customer Experience

Taraet Insurance Partners

Personal lines

G Bought By Many clearly demonstrated their expertise in social and digital marketing of insurance products. Our engagement with them yielded deep insights into market potential and unmet demand.

Tim Hardie, Director, Industrial Alliance Insurance, Canada

For customers

- Customers see an advert on social media or Google; they click and become 'Members' of Bought By Many and join relevant groups
- When groups are large enough Bought By Many negotiates products with partner insurers or designs them itself; these products are offered via the platform

For insurers

- The white-label model starts as a consulting proposition to identify growth opportunities for insurers
- Bought By Many then helps insurers use its technology to aquire customers in those segments

Key Executives

Steven Mendel CEO & Founder

Guy Farley

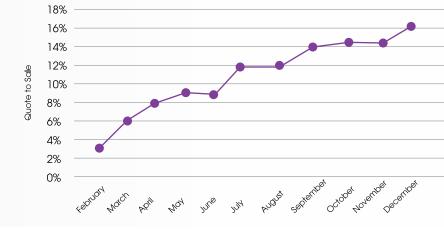
_____ CTO & Founder

• Flnancial Services background (actuary at Aon, consulting at McKinsey & Co.)

- Director at Barclays and Christies
- Experienced Enterprise Architect
- Founded consulting business, Kube Partners

Impact

Following the pet insurance product launch, Bought By Many has continuously improved its marketing and customer journey to boost conversion.



Conversion Rate by Month

Alongside improved conversion, cost of acquisition fell by 60%.

The business beat their 2017 GWP and sales targets set by investors by 46% and 19% respectively.

Customer feedback has been excellent and NPS is consistently above 70.

Case Study 1

Client situation: Bought By Many's customer, Micah Car-Hill, wanted to find insurance for his son's therapy dog, Chief. Most insurers do not offer enough loss, theff or death cover to meet the value of a therapy dog. **What they did:** Bought By Many's analysis had identified a need for a policy with high levels of loss, theff and death cover for certain pets. To meet this demand, the business created its 'Complete' policy with £6,000 of cover as standard. Most other companies cover less than £2,000 for this feature. **Impact:** Micah found Bought By Many through an online advert, joined a pet insurance group and bought the 'Complete' policy.

Case Study 2

Client situation: A Canadian insurer wanted to create and launch a pet insurance product; Bought By Many was engaged to complete an analysis of online search data.

What they did: Bought By Many identified seven insights relating to unserved demand. One insight related to the product itself – the need for a product that covered pre-existing medical conditions. Bought By Many identified what website content was required to win search demand and the specifications for each article / page including target keywords.

Impact: Using a the business plan created by Bought By Many, the client launched the pet insurance product on its own quote and buy platform. Bought by Many initially ran the digital marketing before handing over to the client's team.

Future Applications

Product expansion: The business has just launched a travel product for those with medical conditions and is looking to launch further travel and SME products.

Tech improvements: The business has just launched Snap Claims, an online claims process with no forms; it is also developing a proprietary policy administration platform to facilitate the launching of new products at speed. **International expansion:** The business is looking to distribute internationally and expand its consultancy business with international clients.



GUARDHOG provides usage-based insurance (UBI) for the sharing economy

GUARDHOG has partnered with over 150 sharing economy businesses since going live in September 2016

Year founded: 2016

FTE: 5

Investment to date: No outside investors

Key investors: n/a

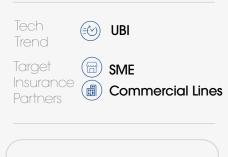
Public insurance capacity providers: **Hiscox**

Revenue growth 2016-17: No 2016 revenue

2017 revenue band: £50k - £1m

Current countries: UK (with EU & global coverage)

HQ: London



Just brilliant. A nightmare scenario had a silver lining as it lead to me to finding out about Guardhog. Amazing service and brilliant. product. A complete no-brainer if you're in the sharing economy & need insurance. Thank you.

Facebook customer review

What do they offer?

GUARDHOG provides an insurance platform for users and businesses in the sharing economy.

To date, GUARDHOG has launched 3 on-demand products:

- HostCover: for home sharing, home exchangers, house sitters
- **StuffCover:** insuring assets when loaned or rented out
- StorageCover: protection for possessions stored with 3rd parties

GUARDHOG's technology platform has been built specifically to deliver insurance products to the sharing economy by integrating with sharing economy platforms.

The Oxbow Partners view

Traction: GUARDHOG hit \$500k revenue run-rate by the end of 2017 with no external funding in place. We think the experience of the management team has been instrumental in getting the business up-and-running so quickly.

Potential: GUARDHOG is in an attractive part of the insurance market; AirBnB stays are projected to increase from 1m to 2m per day from 2017 to 2018. With 150 integrations in place, there is a good platform for growth.

The 2018 challenge: Several companies are pursuing similar business models to GUARDHOG (including Impact 25 Member Zego). We foresee a 'landgrab', which will require GUARDHOG to raise funding and accelerate partnerships quickly in 2018.

For customers

- Users register, add an activity and link to one or more sharing marketplaces
- GUARDHOG is informed when the user is sharing and the user can choose to put cover in place manually or for cover to automatically start each time they share

For sharing platforms

GUARDHOG helps sharing platforms put 'crowd' cover in place, automatically insuring all activity through the platform

Key Executives

Humphrey Bowles

accommodation sharing platform onefinestay

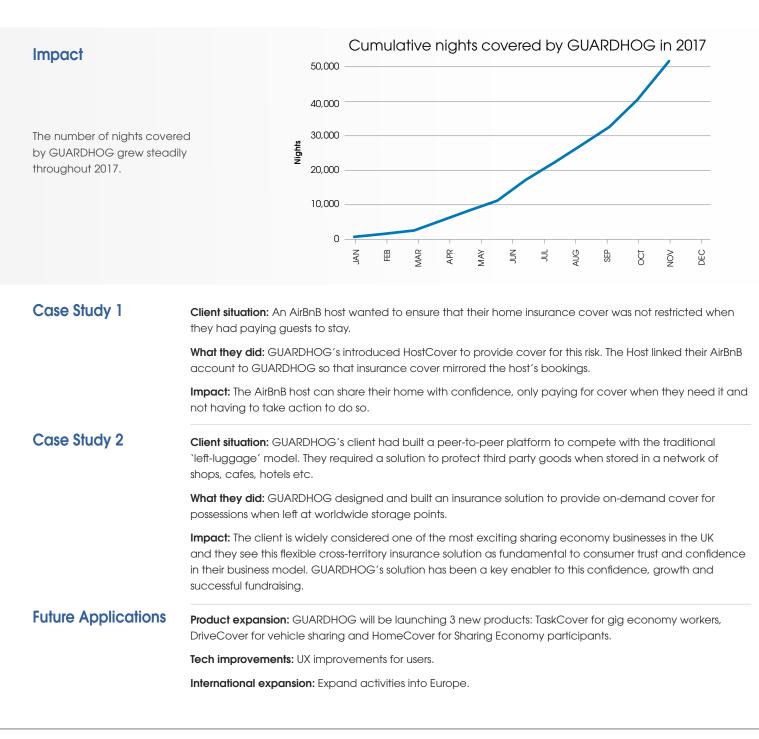
which sold to Accor Hotels for \$180m in 2016

CEO & Founder

Andrew Boldt COO & Founder

Part of the team that grew peer-to-peer

- Experienced insurance entrepreneur
- Founded successful brokerage, Insurance Tailors





Neos provides a home insurance proposition based around smart technology

Distribution

Data & Analytics

Neos's connected home proposition helps customers actively protect their homes, reducing claims costs for insurers. Customers value the solution; NPS is +64 and 94% of TrustPilot ratings have been 'Great' or 'Excellent'

What do they offer?

To customers: Neos provides customers with connected technology including smoke detectors, cameras, motion sensors and leak detectors as part of their home insurance policy.

In case of an incident, homeowners are alerted and Neos's 24 hour monitoring team send out tradespeople to rectify the problem.

To insurers: Neos operate as an MGA in the UK and as an end-to-end white-label insurance IoT solution in other markets.

Neos's technology reduces claims cost (frequency and severity) as the sensors supplied cover the three main causes of loss – fire, theft and escape of water.

The business claims its proposition also increases customer engagement and retention due to its differentiation from other home insurance policies on the market.

Traction: Neos started to get traction in 2017, growing at 1,000% albeit from a low base. With £6m investment and Munich Re onboard as capacity providers, all the components are in place for acceleration in 2018.

The Oxbow Partners view

Potential: Neos is a good example of a trend towards 'embedded insurance'. In other words, rather than thinking narrowly about selling insurance, the company is positioning insurance as the 'backstop' remedy if its attempts to predict and prevent losses have failed.

The 2018 challenge: Neos has built great foundations; in 2018 it needs to prove personal lines IoT is a big market. How many customers interested in a premium home insurance solution? Equally, the business needs to prove its economic model: is the cost of connected devices covered by improved loss ratios? Year founded: 2016

FTE: 30

Operations

Claims & Fraud

Investment to date: £6m

Key investors: Aviva Ventures, Munich Re, EOS Venture Partners, Gary Lineker

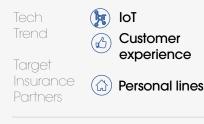
Public insurance capacity providers: **Munich Re**

Revenue growth 2016-17: 1,000%

2017 revenue band: **£50k - £1m**

Current countries: UK

$H \mathbb{Q}: \textbf{London}$



The leak was a small one but I hate to think how much damage could've been done if Neos hadn't detected it

Patrick M, Walthamstow

20

Oxbow Partners

For customers

- Customers purchase the product and have the IoT devices shipped out to their home address; there is no up-front fee for the customer
- There is an installation option, if required

For insurers

.

- Neos operate as an MGA in the UK and offer an end-to-end white-label insurance IoT solution in other markets
- The insurer covers the cost of the tech, which is amortised over the policy lifetime

Key Executives

Matt Poll

CEO & Founder

Michael Postle

CFO

Personal Lines Strategy Director at RSA

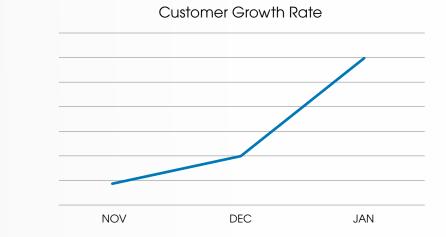
• Corporate Finance at PwC

Business Development Director at AXA

• Commercial Director at More Than (RSA)

Impact

Since launching in August, customer growth has been strong. Customers doubled between November and December, then tripled between December and January.



Case Study 1	Client situation: Neos's customer had a significant leak in the kitchen whilst away on business in Switzerland.
	What they did: Neos's sensors detected the leak and sent the customer an alert via the Neos app. As he did not respond, he was subsequently called by the 24/7 monitoring team. The customer called his wife at home, woke her up and she turned the water off. Meanwhile, the Neos team arranged for an emergency plumber to come out first thing in the morning and fix the problem.
	Impact: The client was able to save significant damage to his property.
Case Study 2	Client situation: Neos was engaged by Aviva to develop an end-to-end, jointly branded solution in order to offer a fully connected home insurance proposition to their customers.
	What they did: Neos developed a solution that allowed Aviva to test the market in line with their requirements.
	Impact: The solution was live with customers within 4 months.
Future Applications	 Neos plans to: Develop their proposition to help customers protect their homes better Link with additional market leading smart home providers Launch white-label partnerships with tier 1 insurers outside of the UK

Oxbow Partners



wefox Group is a digital insurance marketplace for customers, brokers and insurers (wefox) and a digital end-to-end insurance company (ONE)

wefox's digital platform is used by over 250,000 customers and 600 insurance brokers; ONE released its first product (household and personal liability) in February 2018

What do they offer?

wefox Group comprises two integrated but separate digital insurance businesses: **wefox**, a digital insurance marketplace connecting brokers and customers to insurers, and **ONE**, a digital insurance company.

wefox offers 3 key components:

- For brokers, a portal to manage their portfolios digitally
- For insurers, a portal to drive campaigns
- For customers, a digital wallet where they can also connect to their agents

ONE has recently been launched in Germany with a personal liability and a household product. They hold a European insurance licence (incl. Switzerland) and aim to gradually redefine the insurance proposition (e.g. Al to settle claims rapidly, on/off coverage, etc.).

The Oxbow Partners view

Traction: wefox's group revenues exceeded £10m in 2017 – the only company for whom we had to waive the maximum revenue threshold in our eligibility criteria. This is an InsurTech with real traction.

Potential: wefox's vertical integration strategy is interesting and, we believe, unique in the InsurTech space. With strong management teams in both businesses and a wefox panel member that is now fully aligned to the distribution strategy, one must assume that sales will accelerate.

The 2018 challenge: we fox has taken a bold risk with the launch of its own insurer, ONE. Building volumes to justify this investment will be important to guarantee the funding pipeline.

Year founded: 2015

FTE: >130

Operations

Investment to date: \$33.5m

Key investors: Horizons Ventures, Target Global, Salesforce Ventures, Speedinvest, Sound

Public insurance capacity provider: **Munich Re**

Revenue growth 2016-17: 260%

2017 revenue band: **>£10m**

Current countries: Germany, Switzerland, Austria

(B)

HQ: Zurich

Trend Target Insurance Partners

Tech

experience

Customer

Personal linesSME

We are convinced by ONE's futurefocused business model and the strategic and operational strengths of the parties involved

Tobias Sonndorfer, Client Manager, Munich Re

Distribution

Data & Analytics

wefox

- Brokers enrol with wefox and manage their customers via the platform (e.g. leads, digital appointments via app, data analytics on their portfolio)
- Customers download the app, receive their FoxCheck, (i.e. risk analysis) and get in touch automatically with their personal agent

ONE

 Customers download the app and get insurance coverage within minutes. Products are fully flexible, cancellable anytime and 60% of claims are settled within minutes

Key Executives

Julian Teicke Group

CEO & Founder

• Founder of DeinDeal, sold to Ringier with \$100m in revenues

Tasos Chatzimichailidis

CEO wefox

• Former Allianz and QBE senior executive with extensive experience in broker management

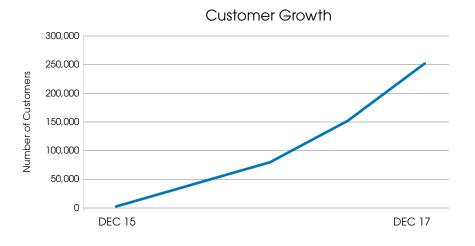
Stephan Ommerborn

CEO ONE

• Former Zurich Managing Director and CEO at UBS Life

Impact

- wefox acquires customers at a fraction of typical industry costs (less than 10%) by focusing on independent brokers, which account for approximately 50% of insurance distribution globally
- wefox `helps independent brokers into the digital age', allowing them to interact 5 times more with customers with a range of digital support and technology at their disposal



Case Study 1

Client situation: Richard, married, two daughters, was looking to manage his insurances more effectively. He appreciated the human interaction, especially when it comes to health and life insurances, and especially in light of his young family.

What they did: wefox onboarded Richard via its customer app, digitized all of his insurance policies, conducted a personal risk analysis and connected him to an insurance agent.

Impact: Richard was able to fully digitize his 'insurance relationships' (digital wallet), effectively manage his entire insurance portfolio, whilst continuing to have a dedicated agent providing him personal advice.

Case Study 2

Client situation: A mid-sized broker with 15 insurance agents looked to professionalize his operations and enhance its overall performance. Management wanted digital tools to (a) better manage the company and (b) improve agent performance.

What they did: we fox on boarded the broker to the platform and provided agents with relevant customer leads, task management, calendar and video conferencing capabilities, and delivered 1st and 2nd level operational support to its customers.

Impact: Agent performance increased substantially, driven by (a) significant reduction of administrative work, (b) increased new business performance through leads, and (c) significant uptake in client interactions per day. The broker in turn was able to manage his agents more effectively in terms of activities and performance.

Future Applications

Wefox plans to:

- Extend the offering to insurance companies to allow them to actively run product or customer-focused campaigns on specific cohorts of customers (or even brokers)
- Gradually increase its international market footprint across Europe
- Continuously expand and streamline the product



Zego provides usage-based insurance (UBI) to gig economy workers on the platform

1.4 million hours have been logged by gig economy workers since launch in summer 2016. Zego's active management of short-term policies on the platform means it can maintain loss ratios 20% lower than the market average

Data & Analytics

Year founded: 2016

FTE: 38

Investment to date: £7.5m

Key investors: Balderton Capital

Public insurance capacity providers: Munich Re, Aviva, Transatlantic Re

Revenue growth 2016-17: 1,780%

2017 revenue band: **£50k - £1m**

Current countries: UK

HQ: London



Target

Insurance

Partners

) UBI

SME

Commercial Lines

It's an exciting and very innovative opportunity which addresses a clear consumer gap traditionally underserved by our industry.

Brian Spinks, Head of New Business, Aviva

What do they offer?

Zego integrates with gig economy apps (e.g. Uber, Deliveroo) to provide usage-based insurance.

Zego's cover automatically starts and stops when the driver logs in and out of the gig economy app, leading to a better customer experience and lower potential for fraud.

The company has launched four products to date:

- UBI for scooter drivers
- Social, Domestic and Pleasure insurance for scooters
- UBI for car drivers
- UBI for cyclists

The Oxbow Partners view

Traction: Zego has logged nearly 1.5m hours on its platform in under two years and attracted significant investment from high profile investors.

Potential: With Munich Re and Aviva amongst their capacity providers and accelerating worker sign-ups, this business looks set to make a real mark in the UBI / gig economy insurance space in 2018. We see opportunities in both D2C and B2B2C.

The 2018 challenge: Several companies are pursuing similar business models to Zego (including Impact 25 Member GUARDHOG). We foresee a 'landgrab', which means Zego will need to ensure sales continue to accelerate in 2018. It will also be interesting to see whether Zego can find a point of differentiation that is not just price/commission.

For customers

- Gig economy workers log into the Zego app to register and add funds to their account; Zego integrates directly with the driver's preferred gig economy platform and cover starts and stops automatically when they are on shift
- The cost is deducted from customers' Zego account

For insurers

- Zego offers access to a new cohort of users and a new revenue stream in an emerging sector
- Zego adds value through its bespoke tech stack that reduces the requirement for additional costs and third party services

Key Executives

Harry Franks CEO & Founder

onefinestay

Sten Saar

- COO & Founder
 - Operations Director at Deliveroo
 - Head of Operations at onefinestay

Stuart Kelly

CTO & Founder

- Head of Engineering at Hubble
- Lead Developer at Mainframe

Impact

Since launching in Summer 2016, the number of drivers signed up has increased steadily and has spiked in the last 6 months.

• Global Head of Procurement at Deliveroo

• Various roles at online hospitality business,



Case Study 1	Client situation: A delivery driver wanted to work flexibly around their university studies for just 15 hours per week as additional income. However, the proportional cost of commercial insurance across those working hours made the job commercially unviable.
	What they did: Zego worked with the customer's gig economy platform to allow them to pay for insurance just when required.
	Impact: With no fixed insurance costs, the insurance enabled the customer to truly be flexible in their working hours.
Case Study 2	Client situation: A large carrier wanted to explore new customer cohorts and new revenue streams in the on-demand economy but couldn't manage micro policies through their systems.
	What they did: Zego integrated the carrier into their bespoke system, allowing the carrier to access customers using micro policies whilst being able to generate their own MI and reports.
	Impact: The carrier was able to access a new cohort of users, a new revenue stream and utilise a new customer experience to develop their digital transformation through their partnership with Zego.
Future Applications	International expansion: Zego's product has been designed to work in other territories – Zego will be expanding into Europe in 2018. Product expansion: Zego will utilise its high engagement and low distribution cost model to offer a range of products to gig economy workers. This will include an infrastructure of best practice around workers in an area where traditionally flexibility has come at the expense of support.

2018 INSURTECH IMPACT 25

Atidot

Atidot provides an analytics product to help life insurers optimize their portfolio

Atidot's platform assisted a mid-sized life carrier in South Africa increase revenue by 35% by identifying customers at high risk of lapsing and helped a tier 1 carrier in the US better identify under-insured customers, increasing the conversion rate of up-sales by 300%

Year founded: 2016

FTE: 15

Investment to date: \$1m

Public insurance customers: **Platinum Life**

Key investors: The D. E. Shaw Group, Bank Hapoalim, Moneta Seeds

Revenue growth 2016-17: No 2016 sales

2017 revenue band: **£50k - £1m**

Current countries: USA, South Africa, Europe

HQ: Israel

Tech Trend Al & Data Insight

Target Insurance Partners 🗢 Life insurance

What do they offer?

Atidot helps life insurers use more of their data in strategic decision making: Data is often siloed in multiple systems and traditional modelling tools are hard to implement and require manual effort.

Atidot extracts raw/unstructured data from insurers' legacy systems and cleans/normalises it, enriches the dataset with external open source data and applies AI, machine learning and actuarial modelling techniques to extract insight.

The Oxbow Partners view

Traction: Atidot has generated material financial benefits with its technology on multiple continents. It has also raised \$6m from high-profile investors and with a staff of just 15 at present this suggests significant financial runway.

Potential: Atidot is one of very few InsurTechs focusing on life insurance. The management team is well qualified to make an impact – founders combine technology expertise from the Israeli military Intelligence Corps with insurance expertise from Swiss Re.

The 2018 challenge: Many life insurers fall into one of two categories. Some are fully focused on replatforming their legacy technology and data landscape and therefore have limited resource for new opportunities. Others are so constrained by their legacy that they are unable to act on data insights. Atidot appears to have found early niches of insurers that do not fall into these categories; the challenge will be moving up into some of the larger players.

Atidot is a subscription-based program offering a self-service technology for portfolio analysis and up-sale lead prioritization, integrated with operational systems.

Atidot has a 90 day evaluation programme which covers: On-boarding of data, defining business goals, configuring the model to a carrier's needs, validating the model compared to internal benchmark and historic results, preparing the model for field testing, gaining feedback and adjusting the model accordingly.

Key Executives

Dror Katzav

CEO & Founder

• R&D technology development in the Intelligence Corp of the army

Barak Bercovitz

CTO & Founder

Director of Strategy and e-Business at Prudential

• Partner at Boston Consulting Group

Assaf Mizan, FIA

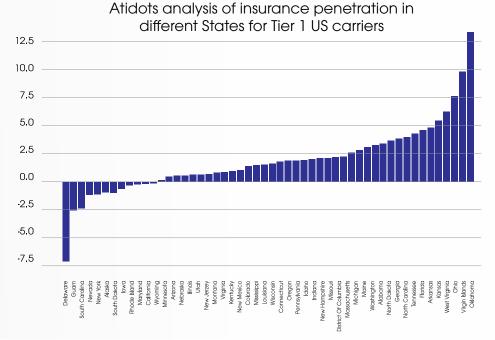
VP Product & Actuarial & Founder

 Past roles include Chief Actuary at the Israeli Ministry of Finance, Senior Pricing Actuary at the Israel branch of Swiss Re

Impact

A tier 1 life insurance carrier wanted to identify under-insured policyholders. Atidot combined various models to complete this goal (see case study below).

Atidot was able to provide specific stateby-state insights to help prioritize targeting strategies. As the chart shows, it is clear that Oklahoma, Kansas, Ohio, and West Virginia are the most under-insured states. From here, the carrier was able to prioritize efforts and conduct tests.



Case Study 1	Client situation: A mid-size, D2C life insurance carrier in South Africa wanted to optimize retention efforts amongst policyholder cohorts with high lapse rates. What they did: Atidot used its platform to predict the lapse propensity of each policyholder. Data from admin systems, CRM systems and cashflow, augmented with external sources, was uploaded to the system. Models (e.g. actuarial analysis, machine learning and predictive models) were used to assess propensity to lapse and the impact of a discount on the policyholder decision. Impact: The optimised retention strategy led to a 35% increase in incoming premium from high-risk customers.
Case Study 2	Client situation: A Tier 1 life insurance carrier in the US wanted to identify under-insured policyholders in its independent advisors channel and create triggers for approach. What they did: Atidot used its platform to predict the level of under-insurance in the portfolio. The analysis was based on data from the carrier, augmented with external sources. Atidot used its methodology to determine the expected level of insurance of each policyholder and define targeting strategies. Impact: The analysis identified a sub-set of 25% of the under-insured policies for a personalised targeting strategy. The conversion rate of up-sales approaches increased by 300%.
Future Applications	In the second half of 2018 Atidot is planning to release a full self-service solution that can help carriers to assess under-insurance potential for a life and annuity book of business and to increase up-sale and cross- sale conversion.



Cape Analytics analyses geospatial imagery with image recognition and machine learning to identify detailed physical property features (e.g. roof condition, building footprint)

Data & Analytics

Clients include XL Catlin and Security First Insurance

What do they offer?

Cape Analytics offers a database of accurate, up-todate property information that can be queried by (re)insurers via an API or in batch.

Data can be used for multiple purposes:

- Primary insurance: Validation of property features at point of quotation, improving quote speed and accuracy
- Reinsurance: Portfolio selection and analysis, where Cape Analytics data is input to reinsurers existing CAT models to assess and monitor cedent's portfolios (e.g. number of gable roofs) and to test the quality of the underlying data being used by cedents.

The Oxbow Partners view

Traction: Cape Analytics is establishing itself as one of the leading emerging geospatial analytics providers. It recently agreed a partnership with Tiger Risk, the broker, and Nephila, the alternative capital provider is a client. In October 2016 the business raised \$14m; XL Innovate, XL Catlin's venture arm, is an investor.

Potential: Risk surveying (at point of underwriting and claim) are high cost activities that are ripe for technological enhancement. We see Cape Analytics' proposition as one of a suite of technologies which will help insurers and brokers take cost out in this area. Furthermore, peak capacity management has come into sharp focus with the recent storms in Florida; this is a capability Cape Analytics can help deliver.

The 2018 challenge: The geospatial imagery and analytics space is quickly becoming crowded. It remains to be seen whether the market becomes an oligopoly (similar to catastrophe modelling) or if there will be a range of niche suppliers. Cape Analytics will need to broaden its footprint quickly to be positioned for either scenario. Year founded: 2014

FTE: 50

Operations

Investment to date: \$15m

Key investors: XL Innovate, Formation 8, Data Collective

Public insurance customers: Security First Insurance, XL Catlin, Nephila

Revenue growth 2016-2017: Not disclosed

2017 revenue band: **>£100k**

Current countries: US

HQ: Mountain View, CA and Munich

Tech Trend AI & Data Insight

Target Insurance

Personal lines Reinsurance

Cape Analytics' solution provides us with instant access to validated property features at the time of quote. Their data and technology have been extremely valuable to our business and improving customer experience

Werner Kruck, COO, Security First Insurance

Implementations start with a proof of concept

- Carriers provide Cape Analytics with a cross section of their current book of business
- Cape Analytics returns the book with highlighted discrepancies, additional data and supporting imagery

Key Executives

Ryan Kottenstette

CEO & Founder

- Khosla Ventures
- Blue River Tech

Suat Gedikli CTO & Founder

PhD, Technical University of Munich

Olivier Collignon VP Product & Data

• RMS

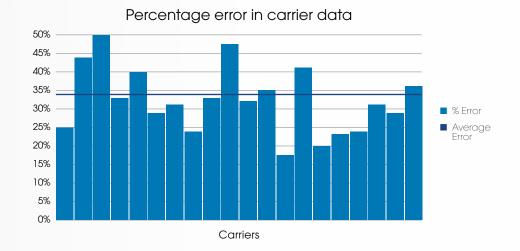
Busy Cummings

VP Sales

- AIG
- DocuSign (insurance vertical)

Impact

- Cape Analytics has reviewed cross sections of over 50 US insurance carriers' books of business
- On average Cape Analytics finds that over 30% of a carrier's policies are bound with incorrect data



Client situation: A leading US regional carrier was in the process of evaluating their traditional inspection programme in order to improve efficiency, reduce costs and improve customer experience.

What they did: Cape Analytics provided data allowing the carrier to move to a virtual inspection platform. The insurer also updated their underwriting workflow to automatically triage properties based on roof geometry and roof condition in order to understand which properties were most likely to result in an actionable inspection discovery.

Impact: The insurer reduced inspection spend by over 50% and eliminated customer involvement in scheduling and participating in physical inspections, whilst maintaining underwriting quality.

Case Study 2

Case Study 1

Client situation: XL Catlin's reinsurance business wanted to empower their cedents with better data for decision making to help with more accurate reinsurance purchasing and pricing.

What they did: Cape Analytics evaluated the difference in Average Annual Loss for cedent portfolios before and after using Cape Analytics data.

Impact: Using Cape Analytics data resulted in up to +/- 15% change in Average Annual Loss for cedent portfolios. XL Catlin was also able to understand the accuracy and completeness of data in cedent portfolios.

Future Applications Product expansion:

- Continuously expanding available property features
- Evaluating new use cases in homeowners insurance and new verticals (e.g. commercial insurance and mortgage)



Carpe Data provides new data sources to insurers to help them quote and settle claims faster and more accurately

Data & Analytics

Carpe Data's solutions are used by over 40 insurers in the US. The business's claims solution, which includes fast-tracking of claims payment and fraud detection, helps clients realise a 10x ROI

Year founded: 2016

FTE: 40

Operations

Investment to date: \$6.6m

Key investors: Aquiline Technology Growth

Public insurance customers: Allstate

Revenue growth 2016-17: 130%

2017 revenue band: **£1m - £5m**

Current countries: USA, Canada, UK

HQ: Santa Barbara, CA

Trend

Target

Partners

Al & Data Insight Customer experience

Personal lines Insurance

SME

Carpe Data will help support Allstate's ongoing efforts to seamlessly integrate data to help our people make the best, most accurate, and timely decisions.

Glenn Shapiro, President, Allstate Personal Lines

What do they offer?

Commercial insurance solutions: Includes form data pre-fill, eligibility assessment and verification; automated underwriting is supported through scoring of risks based on available data.

One-time claims solution: Automated assessment of publicly available online activity to verify claims.

Recurring claims solution: Scalable solution which automatically assesses online activity to monitor risk and claims in portfolios.

The Oxbow Partners view

Traction: With over 40 insurance customers, Carpe Data is becoming well-established in the US insurance ecosystem (with a view to expanding to Europe in 2018). The fact that Allstate was prepared to comment on the impact of using Carpe Data in a November 2017 press release is significant.

Impact: Carpe Data is one of only a few InsurTech data companies that is showing real traction. We believe that its platform will be attractive to European insurers in 2018.

The 2018 challenge: The 2018 challenge will be internationalising the business from its California base: the cultural hurdles will be significant.

- For incoming risks on a per-application basis data points can be validated or pre-filled via an API, including the answers to eligibility / underwriting questions (e.g., does a restaurant serve alcohol)
- Insurers submit limited policy or claimant data to Carpe Data which can be monitored for relevant, actionable activity that would otherwise be either too difficult or expensive to find

Key Executives

Max Drucker

- CEO & Founder
- CIO of eCoverage
- Managing Partner, Steel Card (acquired in 2006 by ChoicePoint, now LexisNexis)

Geoffrey Andrews

- COO & Founder
- Director, Steel Card
- Management Consultant with PwC

03201

Impact

Carpe Data's transaction volume increased over 200% in 2017. This has been driven by:

- The onboarding of new clients
- Increasing usage of existing customers
- Adoption of new data products brought to market

Case Study 1

Client situation: A commercial insurer wanted to reduce the time and cost of underwriting small business insurance while improving pricing accuracy.

QA2016

012017

Carpe Data Transaction Volume

022017

What they did: Carpe Data implemented their Data Pre-Fill, Validation & Qualification, and Predictive Scoring solutions into the insurer's processes.

Impact: Application times fell from ove 30 minutes to under 5 minutes. Unwanted business was identified more quickly, reducing cycle time and increasing agent satisfaction and new business velocity dramatically increased, resulting in high growth and lower combined ratio.

Case Study 2

Client situation: A top 5 US carrier wanted to understand the economic potential of assessing claims against the cost to do so.

What they did: Carpe Data's fraud detection platform identified potential fraud on 26% of cases and was able to take action on approximately 50%.

Impact: Within two weeks of receiving results the carrier was able to close cases, one of which resulted in a total savings of over \$500, and, overall, greater than 50x ROI.

Future Applications

Carpe Data plans to continue to build new products for different use cases across the policy lifecycle. Future use cases include:

- Trade sector-specific loss propensity scores
- Accelerated underwriting for life insurance
- Life events tracking
- Lead qualification
- Loss cost predictor
- Continual integration of new data sources across all products.

31

QA2017

5 CYtora

Cytora provides risk targeting, selection and pricing advantage for commercial insurers

Cytora's Risk Engine is used by commercial insurers including XL Catlin, QBE and Starr. Initial results have included helping a global insurer find a £10m premium pool and delivering a loss ratio improvement of 33% for a global P&C insurer.

What do they offer?

Cytora uses artificial intelligence and external data to improve the way commercial insurers quantify, select and price risk. Cytora's product, Risk Engine, works by:

- Continuously ingesting data from thousands of online sources, e.g. online journals, news reports
- Cleaning, structuring and normalising this data
- Calibrating the data against insurers' internal data to align use with business objectives

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

The Risk Engine also facilitates questionless underwriting.

The Oxbow Partners view

Traction: Cytora's case studies speak for themselves. The business is creating real value for insurer and it comes as no surprise that a high profile insurance executive (former AIG CEO Maurice Greenberg) was involved in a £4.4m funding round in Q4 2017.

Potential: We have been impressed with Cytora's proposition and trajectory since we first met the business in 2016. Their market coverage operation is focused and dogged (if somewhat stretched) and we see them making serious progress with high profile customers in 2018.

The 2018 challenge: Cytora need to prove that their methodology and technology work outside their core segment of SME property.

Year founded: 2014

FTE: 50

Investment to date: £6.5m

Key investors: **Starr, QBE,** Hank Greenberg, Cambridge University

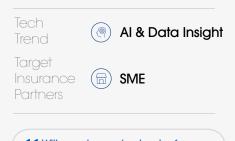
Public insurance customers: XL Catlin, QBE, Starr

Revenue growth 2016-17: 9,900%

2017 revenue band: **£5m - £10m**

Current countries: UK, Australia, US

HQ: London



With ever-increasing levels of available data we can really see the benefits that artificial intelligence and other similar technological advances bring to the industry. We believe that Cytora can use this information in a powerful way to provide a competitive edge to Starr and its other clients.

Maurice Greenberg, Chairman, Starr Companies

- Cytora integrates into the insurers' existing technology architecture to provide risk scoring and pricing capabilities
- Cytora also provides access to a SaaS application for underwriting teams

Key Executives

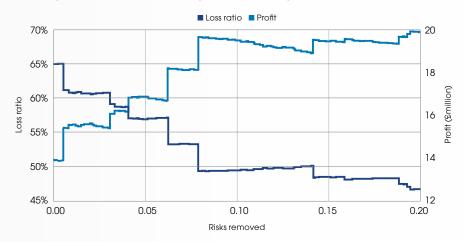
Richard Hartley	Andrzej Czapiewski	Aeneas Wiener	Joshua Wallace
CEO	COO	CTO	CRO
 Product manager at eBaoTech, a 	Researcher at the World Bank	Background in scientific research	Consultant at Cognizant
cloud technology vendor to the insurance industry		 Ph.D. in Computational Nano-Optics from Imperial College London 	

Risk Engine performance against existing P&C porfolio 2011-17

Impact

When backtesting a commercial property portfolio of a leading P&C insurer, Risk Engine successfully:

- Improved loss ratio by 18 percentage points from 65.7% to 47.7%
- Increased profit by 43%; from £13.9m to £19.9m



Case Study 1

Client situation: A large commercial insurer wanted to increase profitability by reducing underwriting and distribution costs in SME segments. They also wanted to enable underwriters to refocus time on complex referrals in profitable areas.

What they did: Cytora's Risk Engine augmented the insurer's internal pricing with a technical risk price for every potential customer in the market, enabling automated risk selection and pricing across a pipeline of live submissions from panels and aggregators. Cytora ranked micro-segments according to loss ratio, enabling the insurer to continuously assess their portfolio mix against the total population to target the most profitable consumers.

Impact: The insurer's underwriting expenses in SME segments were reduced by 60%. They were able to exclude unprofitable sub-segments and refine marketing campaigns to target the most profitable segments of the total population.

Case Study 2

Client situation: A commercial insurer was seeing attritional loss ratios rising quickly, reflecting rising rate pressure and unchanged portfolio mix. The insurer needed to validate whether losses resulted from short-term deviation or more fundamental change.

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 segments. Cytora identified 20 attractive micro-segments to target. Cytora helped the insurer integrate risk scoring and pricing into their existing underwriting workflow, enabling underwriters to access information outside of question sets and base risk selection and pricing on market-wide experience instantly at the point of quote and renewal.

Impact: The insurer reduced their commercial property loss ratio by 18 percentage points over the following underwriting year. They also improved submission conversation in target segments by 8%.

Future Applications

Cytora is currently developing a digital toolset to:

- Help businesses mitigate and reduce their risk
- Create new, automated products in emerging and underserved areas, by having superior underlying data



Digital Fineprint (DFP) provides a social media analytics platform to the insurance industry

DFP allows insurers to increase customer engagement, cross-selling and up-selling by over 50%. The business has partnered with insurers including QBE and Hiscox

What do they offer?

DFP provides a customisable social media analytics product. The product is primarily used to connect social media users with insurance policies.

Through analysis of social data (using predictive analytics and machine learning), the company creates actionable marketing and pricing / underwriting insights.

Products include:

Social Autofili: Completing an insurance quote form using LinkedIn or Facebook details (used for SME insurance and personal lines).

LinkedIn Analytics: Insurers can send insurance product or coverage suggestions to customers based on LinkedIn data.

The Oxbow Partners view

Traction: DFP's patent-pending technology has resonated with insurance businesses and has been introduced into live processes by insurers such as Hiscox and QBE; for a small (14 FTE) and new (founded 2016) business, this is impressive.

Data released from trials includes:

- Using Social Autofill increased conversion rate from lead to sale for a major UK insurance broker by 4x
- 30% increase in lead generation for a major UK insurance broker
- 40% reduction in customer acquisition costs driven by targeted advertising

Potential: Social media data has the potential to be used at every step of the insurance value chain. DFP is one of only a few companies exploiting this opportunity.

The 2018 challenge: The 2018 challenge is to grow profitably, navigating the challenge of whether to evolve into an advisory business with technology, or a pure technology company.

Year founded: 2016

FTE: 14

Operations

Investment to date: £2.3m

Key investors: Pentech Ventures, EoS Venture Partners, Andy Homer (ex-CEO of AXA UK and Towergate)

Public insurance customers: **QBE**, **Hiscox**

Revenue growth 2016-17: 745%

2017 revenue band: **£1m - £5m**

Current countries: UK, Singapore, US

HQ: London

Tech
TrendImage: Market StateAl & Data Insight
Customer
experienceTarget
Insurance
PartnersImage: Market State
Image: Market State
SMEPersonal lines
SME

personalised service.

role social media could

play in providing a more

We're excited about the

Head of Underwriting Insights, Hiscox

- DFP's SaaS platform is integrated following a standard setup but can be customised to each insurance company; it is compliant with ICO (UK), GDPR (EU) and BDSG (Germany) privacy / data protection rules
- The platform can be used for distribution and marketing as well as underwriting

Key Executives

Erik Abrahamsson

CEO & Founder

(strategy)

- Jin Chen
- CTO
 - Data Scientist with specialism in big data analytics
 - Previously a consultant at Strategy& and Capgemini

Impact

DFP's client had attempted social media marketing in the past but had not seen a positive ROI. By applying proprietary analytics models, DFP increased the number of leads by over 7x and turned social media from the 7th to the 4th most common lead channel. Total integration time from launch to these results was 8 weeks.

• Started the company during his MBA at Oxford

• Previously worked at P&G (finance) and Twitter

195 Preceding 8 weeks

Number of customers generated from social media

Case Study 1	Client situation: A major APAC insurer was launching a D2C sales channel in the UK.	
	What they did: DFP built a Social Autofill solution enabling their customers to click 'Autofill' in order to get an indicative quote and a recommendation for policy amount.	
	Impact: The client saw increased conversion rates and dramatically higher marketing ROI compared to existing distribution channels, adding \pounds 3.2m to the global P&L in the first 12 months.	
Case Study 2	Client situation: A top 5 UK insurer was looking for new ways to reach the right SME insurance customers.	
	What they did: DFP built a LinkedIn Analytics Solution which allowed customers to get tailored recommendations by connecting with their LinkedIn account.	
	Impact: The estimate for GWP uplift was £5m, with customer acquisition costs falling by 40% driven by targeted advertising.	
Future Applications	DFP plans to use social media data throughout the insurance value chain. Current applications on the roadmap include:SME insurance risk assessment from social data and review data	
	End-to-end insurance distribution for personal lines insurance	
	Facebook applications for distribution of insurance on mobile devices for example through the Facebook messenger application	
	Insurance broker tools to enable acquisition of social data directily from a self-service platform	

Operations

Flock uses big data to quantify the risk of drone flights in realtime, offering pay-as-you-fly insurance for drones via a mobile app

Distribution

Data & Analytics

Flock uses big data to quantify the risk of drone flights in real-time, offering pay-as-you-fly insurance for drones via a mobile app

Year founded: 2015

FTE: 7

Investment to date: £520k

Key investors: Downing Ventures, London Co-Investment Fund

Public insurance customers: Allianz Global Corporate & Specialty SE (AGCS)

Revenue growth 2016-17: Not disclosed

2017 revenue band: **£50k - £1 m**

Current countries: UK

HQ: London

Tech () UBI Trend () Al & Data Insight Target Insurance () SME Partners

Costing is good and the idea is brilliant to insure you only when you need it. Customer service is very helpful and friendly too. Highly recommended.

Ryan Davidson, Flock Customer

What do they offer?

The 'Flock Cover' app provides on-demand insurance for drone pilots.

Flock's algorithms aggregate static and real-time data including drone information (e.g. model), operator profiles, environmental data and hyper-local weather conditions (accurate to within a few minutes and a few hundred meters) to support underwriting and provide risk management information to users.

Claims are processed by Flock's digital claims platform which minimises fraud by reconciling customer claims reports with actual machine and environmental data collected at the time of the incident.

The Oxbow Partners view

Traction: Flock has had an impressive start: there are an estimated 3700 commercial drone pilots in the UK and Flock has managed to sign up 500 of them just over two months. We are also impressed that the business has built sufficiently robust risk pricing methodology to persuade Allianz to rely on it as their pricing input.

Potential: The drone market is embryonic but growing fast. Flock has the potential to establish itself as the leading platform in the space. In our view, the bigger opportunity might however be the business's ability to convert complex data, including real-time situational data, into predictive pricing inputs. That could be hugely valuable to insurers for emerging, data-rich areas such as commercial IoT.

The 2018 challenge: Insurance is increasingly being 'embedded' in digital platforms – for example sharing economy users activate Guardhog or Zego insurance not directly but through the sharing economy platforms. Flock feels like the kind of proposition whose distribution will be driven by its ability to secure manufacturer or platform partnerships quickly.

For customers

- Flock offers short-term policies which can be purchased instantly or scheduled up to 10 days in advance
- Pilots can select cover duration (between 1 and 8 hours) and public liability limits (from £1 to 10m)

For insurers

- Flock's algorithms convert complex static and real-time data into quantified risk analytics for individual drone flights; all calculations take place in the cloud and are computed in a matter of milliseconds
- The output is a single metric that represents the potential damage caused by any given drone flight at the point of take-off
- In current implementations, premiums are priced proportionally to the risk metric and underwritten instantly by the insurer (Allianz)

Key Executives

Ed Klinger

CEO & Founder

M.Phil Technology from University of Cambridge

- M.Eng from University of Oxford
- Analyst at Blackstone

Antton Peña

Founder

- Concept car designer at AUDI
- UX designer at Scentee
- Co-founder of Farewill

Impact

Flock's platform is made available to customers via a mobile app.

	The Strength of the Stren	57 min her
11 - 10		12
PLAN A FLIGHT FOR CAME	ALKIN, PICTOSRAPHT manint man	Benjatiq and ig decided 8

 Case Study 1
 Client situation: Allianz wanted to access premiums in an emerging market, requiring a deep understanding of real-time risk, enhanced data about their customers, and protection from potentially high-risk scenarios.

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

 Impact: Over the first 2 months, 500 customers have registered with Flock, which represents 14% of the total commercial drone pilots in the UK.

Case Study 2 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 their pay-as-you-fly drone insurance application, which allows the purchase of fully customisable, hourly insurance policies from £5.

Impact: The pilot now has more control over their insurance spending and is able to pass the insurance costs directly on to their customers.

Future Applications

Product development: Flock is continuing to develop its platform's capabilities, improving its ability to integrate with existing insurer workflows such as the claims process. When claims are made, Flock leverages insights from time stamped data in order to continuously validate and improve its Risk Intelligence Engine. Flock is also partnering with manufacturers, software providers and retailers to distribute its insurance platform.

New verticals: Flock is working with insurers to explore the expansion of its real-time pricing and distribution platform into new verticals.

Geospatial Insight uses advanced analytics to draw insight from aerial imagery

GEOSPATIAL INSIGHT

Geospatial Insight's platform provided images and image analytics of the aftermath of Hurricanes Harvey, Irma and Maria 5 days before loss adjusting teams arrived

FTE: 28

Year founded: 2012

Investment to date: £2.3m

Key investors: VenturesOne

Public Insurance customers: Guy Carpenter, Marsh, Flood Re

Revenue growth 2016-17: 130%

2017 revenue band: **£1m - £5m**

Current countries: US, Europe, South Africa, Malaysia, China, India, Guinea, Middle East

HQ: UK

Partners

Tech Trend (a) Al & Data Insight Target Insurance

Reinsurance

.

What do they offer?

Geospatial Insights uses machine learning and big data analytics to provide insight from satellite, drone and aircraft imagery. There are 3 insurance use cases:

- Precise risk analysis: Using satellites to help understand risk location and elevation to millimetre levels of precision
- Dynamic risk analysis: Using satellite imagery for dynamic monitoring of insurable assets
- Rapid response post-loss: Using aerial footage and analysis of catastrophe events before loss adjusters can make assessments

The Oxbow Partners view

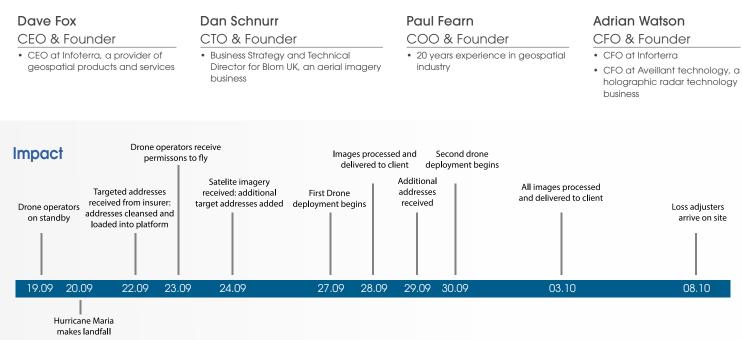
Traction: Geospatial Insight is working with over 10 (re)insurers including Guy Carpenter, Marsh and Flood Re.

Potential: We believe that there is significant potential to improve the quality of geospatial data in the models insures use. Insurers using this insight will achieve benefits, ranging from selecting risks better to managing their aggregates better. Hiscox has recently taken this further and launched its own US flood product to compete against the National Flood Insurance Program, partly based on better data insight.

The 2018 challenge: The geospatial imagery and analytics space is quickly becoming crowded. It remains to be seen whether the market becomes an oligopoly (similar to catastrophe modelling) or if there will be a range of niche suppliers. Building a meaningful foothold quickly is key to be positioned for either scenario.

- Insurers can access Geospatial Insights data in two ways:
- Buy individual reports from Geospatial Insight
- Access Geospatial Insight's web-based proprietary data and analytics portal; users can view specifically requested content (e.g. analysis or imagery) or generic analysis

Key Executives



During Hurricane Irma, Geospatial Insight was able to provide its client with high resolution drone imagery of the event 5 days before loss adjusters could arrive at the scene, thereby expediting the claims process.

Case Study 1

Client situation: A large insurer wanted to increase the speed of hurricane claims assessments using aerial imagery.

What they did: In the wake of Hurricane Harvey, Geospatial Insight geocoded all relevant policyholder data to develop baseline situation assessments, scheduled flight plans and organised the logistics of collecting and analysing image data of the hurricane aftermath. The business built a flexible response strategy capable of handling changes in access to aircraft and other resources, cloud-cover visibility and the evolving storm path.

Impact: Within a week of Harvey making landfall, Geospatial Insight delivered: Predictive assessments of storm and flood paths (and potential damage), detailed property-level assessments of damage and a bespoke, customer-facing user interface allowing a group of policyholders to access information and damage estimates.

Case Study 2

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, the blast and resulting chemical damage had been identified and mapped, enabling accurate loss estimation predictions well before loss adjusters could assess the site.

Future Applications

NS In 2018 the business plans to use geospatial imagery to monitor risk dynamically, allowing insurers to monitor insured assets and identify change to enable the continual evaluation of risk, adjustments to premiums and rapid response to associated loss events.



Insurdata's technology is used by insurers and reinsurers to develop high-resolution, accurate location information, including peril-specific property attributes

Following a recent proof of concept, Paul Nunn, SCOR's Head of Catastrophe Modelling commented `The approaches, tools and methods Insurdata has developed can make a material difference to modelled loss estimates'

What do they offer?

Insurdata technology is used by insurers and reinsurers to develop and augment building-level property insight. Peril-specific exposure attribute data is available from point of underwriting to portfolio management. Additional services include generation of 3D propertyspecific models.

This 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.

The 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 API.

The Oxbow Partners view

Traction: Founded only in 2017, Insurdata has been quick to make an impact in the industry. Multiple insurance executives called out this business as one to watch based on the results of their 2017 proofs of concept.

Potential: Insurdata has a world-class management team with decades of insurance modelling experience behind them (RMS). Early pilots in the first year of operation demonstrated impact beyond management's expectations, suggesting to us that this business will have impact in 2018 and beyond.

The 2018 challenge: Insurdata was in `set-up' mode in 2017 with a team of experts in London and Denver. As client demand increases, the company will need to deliver at greater scale, globally.

Year founded: 2017

Operations

FTE: 9

Investment to date: \$1.3m

Key investors: Menlo Ventures, Anthemis, PlugAndPlay and ManchesterStory

Public insurance customers: Baloise, reThought Insurance, SCOR

Revenue growth 2016-2017: No 2016 revenues

2017 revenue band: **£50k - £1m**

Current countries: Europe, US

HQ: Denver, US



to assess the risks to which an individual property is exposed, allowing us to calculate risk on a micro level, building by building

Nicolai Heitz, Business Analyst, Non-Life, Baloise

- Insurdata technology is available through API. Clients have accessed Insurdata technology through integration or consulting projects
- API integration is available through clients' internal systems or through third-party vendor technology at point of underwriting or retroactively through the post-bind portfolio management process
- Within the (re)insurance industry, exposure data is predominantly analysed using Microsoft Excel, and the Insurdata Microsoft Excel add-in is readily available
- Insurdata technology scales globally, and has to date been used to augment data in 84 countries through both consulting projects and API integration

Key Executives

Jason Futers

CEO & Founder

management industry

- Jeremy Sterns
- CTO
- Started career at Microsoft
- CTO to numerous data-driven small businesses over a 20 year period

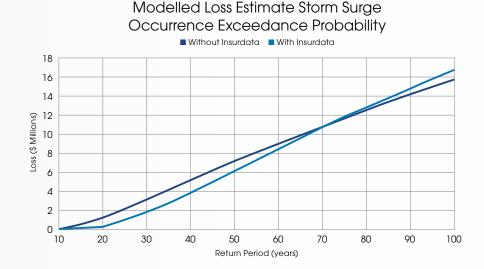
• Executive at RMS, holding positions including Global Head of Sales, CEO and Director, RMS Japan and Head of Emerging Risk Innovation

• 20 years experience in the (re)insurance risk

Impact

A recent project resulted in material changes to the client's modelled loss estimates, including:

- Average Annual Loss: ~22% of exposures . had a minimum ~5% change in average annual loss
- Occurrence Exceedance Probability: ~20% impact on return period modelled loss estimates



Case Study 1	Client situation: The client's focus was on high-quality, high-resolution underwriting and pricing of US flood risks at point of underwriting.
	What they did: Insurdata integrated its API into the client's underwriting process through Microsoft Excel, including primary exposure characteristics and key peril-specific attributes.
	Impact: The client achieved a significant impact on understanding and pricing of risk.
Case Study 2	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 UK, and multiple countries in Asia. Insurdata assessed the risk using augmented exposure information, Digital Elevation 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.
Future Applications	Insurdata's focus is on property data in key global markets.
	Plans for future development and application of Insurdata technology includes the public release of its SDK (Software Development Kit), which has already been developed and global expansion into other exposure types and coverage.

Cognotekt

Cognotekt creates AI software for insurers to automate administrative and claims processes

Cognotekt's software can automate up to 90% of claims (depending on type) and reduce indemnity spend by up to 10%. It can also automate customer correspondence management. Cognotekt is live with 4 German insurers

Cognotekt have a SaaS platform to allow insurers to:

- Automate administrative and claims processes
- Perform deeper analysis on processes and indemnity spend

Sophisticated language processing technology is at the core of Cognotekt's proposition: their experience suggests that insurers do not have enough data to automate processes using machine learning (search the Oxbow Partners blog for more details).

The business's current focus is on automating motor and non-motor P&C claims.

The Oxbow Partners view

Traction: Cognotekt turned over nearly €4m in 2017 – 5 years after it was founded and without any outside funding. Amongst the current cohort of InsurTechs, this is impressive.

Cognotekt has four live implementations with German insurers including SV Sparkassenversicherung and R+V Versicherung. Data from these pilots demonstrates that the business is creating real value, for example:

- Process cost reduction by up to 70%
- Indemnity spend reduction by up to 10%

Potential: We believe that Cognotekt is advanced in the development of differentiated software to automate processes. We believe that this IP has the potential to be adopted widely in insurance.

The 2018 challenge: Cognotekt has grown without outside investment since 2013. In 2018 it will need to ensure it keeps ahead of competitors as robotics and Al become more congested spaces. Year founded: 2013

FTE: **40**

Operations

Investment to date: No outside investors

Key investors: **n/a**

Public insurance customers: SV Sparkassenversicherung, R+V Versicherung

Revenue growth 2016-17: 52%

2017 revenue band: **£1m - £5m**

Current countries: Germany

HQ: Cologne

Tech Trend Process Automation Customer Experience

Insurance Partners Personal lines
 SME

Al solutions from Cognotekt allow us to fundamentally change our business model **?**

Jan Schellenberger, CTO Health AG

- Cognotekt sends a team of experts to `listen' to the client's existing process (c. 6-8 weeks); this involves watching existing processes, collecting data and prototyping the solution
- Developers design and deploy the production software (which is licensed to the customer) to automate the process

Key Executives

Jobst Landgrebe

CEO & Founder

- Physician and applied mathematician by training
- Previously strategy consultant at Booz & Company and data & analytics at Allianz

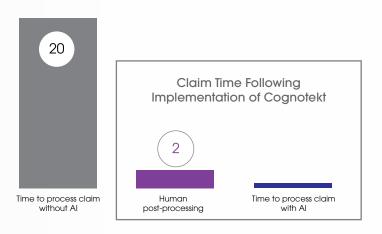
Dr Dankwart v. Schuldtzendorff

- Director
- 30 years insurance experience
- Senior roles at Aon Germany and AXA Germany

Impact

Cognotekt found that their client was spending c.20 minutes on any glass claim. After implementing Cognotekt's technology, each claim was processed in 100 milliseconds.

Claims still require post-processing by a human; this currently takes c. 2 minutes / claim but the company is working to reduce this to c.10 seconds / claim.



Case Study 1	Client situation: An insurer wanted to automate claims validation in motor claims (glass damage).	
	What they did: Cognotekt used their language technology to create software to automatically compare claims against reference calculations for the specific type of damage. The software reads the bill's line items and compares the data against the reference values.	
	Impact: The client was able to automate 90% of claims and reduce indemnity payments by 10%.	
Case Study 2	Client situation: An insurer wanted to automate customer correspondence management.	
	What they did: Cognotekt used their language technology to create a correspondence engine that reads client correspondence and extracts the information to be able to answer.	
	Impact: The client was able to automate up to 90% of customer communications.	
Future Applications	Cognotekt plans to:	
	 Increase the scope of the customer correspondence management application Enlarge the claims validation proposition to more claims types Improve core technology Automate digital representation of tabular contents 	



INSTANDA is a cloud-based Platform-as-a-Service

INSTANDA's platform is live with 28 clients in the UK, Europe, US, Canada and Australia. The platform enables operational cost reductions of between 25% and 50% and allows new products to be built and launched in a matter of weeks

Year founded: 2012

FTE: 60

Operations

Investment to date: Not disclosed

Key investors: Microsoft, Plug and Play

Public insurance customers: Zurich UK, LV, Sompo Canopius

Revenue growth 2016-17: 561%

2017 revenue band: **£1m - £5m**

Current countries: Global

 $\ensuremath{\mathsf{HQ}}\xspace$: London

Tech Trend Platforms / APIs Customer experience

Target (Insurance Partners (

Personal lines

Ve never come across a system which has the same power and flexibility as INSTANDA. We are now contemplating product releases at a pace and cost we never thought possible.

Undisclosed Executive, Top 5 Insurer

What do they offer?

INSTANDA is a self-service tool for building and distributing insurance in any online channel (e.g. direct, broker portals).

Non-technical staff can build new products or change old ones using drag and drop features (build costs are c.90% lower than traditional methods).

Time to market is significantly quicker than traditional systems: Implementation can be weeks or even days.

The Oxbow Partners view

Traction: is growing quickly. c.70% of their live clients were acquired in 2017 which is reflected in the business's impressive 2016-17 growth rate of 561%. There are now over 100 products live on their system.

Potential: We are seeing more and more insurers and MGAs consider their core platform strategies. For the large players this involves thinking about niche platforms for specific products, innovations or markets. For smaller players it is the realisation that the 'household names' are not the only viable options. We think INSTANDA, with its proven technology and experienced management team, are well placed to capitalise on this trend.

The 2018 challenge: Product development using the INSTANDA platform will represent a dramatic shift for traditional players – this will prolong sales cycles. Products launched on the platform could also take some time to get to scale, meaning that INSTANDA (given its PaaS model) would benefit from persuading insurers to migrate existing products onto the platform.

Data & Analytics

- INSTANDA provides an end-to-end SaaS platform which its team helps to implement and customise on the client site
- Once implemented, clients can use the systems independently of INSTANDA (e.g. D2C websites and API configuration)
- Existing books of businesses can be transferred onto the platform

Key Executives

Tim Hardcastle CEO & Founder

Derek Hill COO & Founder

- Experienced board-level CIO at FTSE100 / 250
 companies, including Hiscox
- Founder of F2X Ltd., INSTANDA's parent company
- Former head of IT Services at Hiscox
- Founder of F2X Ltd., INSTANDA's parent company

Impact

INSTANDA is growing globally and has clients in the UK, Ireland, Germany, Denmark, Spain, Lithuania, Canada, USA and Australia. The business will soon be expanding its footprint to South America.



Case Study 1	Client situation: Zurich UK wanted to simplify the process for brokers to receive quotations for its SME commercial combined offering.
	What they did: INSTANDA delivered a new digital broker platform with ease of trading as its key point of focus.
	Impact: The product went live within 17 months. The initiative helped Zurich UK win e-trading Initiative of the Year (Insurance Times) & Product innovation award in 2017 for the project with INSTANDA.
Case Study 2	Client situation: Imperium Insurance Mgmt Ltd. (a young MGA) wanted a policy admin system that made it easier to bring complex products to market.
	What they did: INSTANDA worked with Imperium in a `co-build' style, initially building a commercial tradesman product. Since then, Imperium has established an INSTANDA `super user' on their side, who can build products completely independently of INSTANDA .
	Impact: Imperium has built over 10 products across multiple business lines independently of INSTANDA. iFarm won Insurance Start-up of the Year in 2017 (Insurance Insider Awards) using INSTANDA.
Future Applications	Client situation: Exsel (a Spanish MGA with Lloyd's capacity) wanted to `digitise' a book of business which was paper-based and expensive to run. They selected INSTANDA as their platform partner.
	What will INSTANDA do? Having built three products independently last year, Exsel plans to move all existing products (as well as a pipeline of 17 new products) onto the platform.

KASKO

KASKO helps insurers design, distribute and run digital insurance products in any digital channel

In 2017 KASKO launched over 20 products for 14 insurance partners in 4 countries across various business lines with an average time to market of 2-3 weeks and an average cost of 26 k per product

What do they offer?

KASKO offers an end-to-end insurance platform to enable insurers to create, launch, run and optimise digital insurance products in any distribution channel quickly, cost-effectively and flexibly.

Specific features include:

- White-labelled front-end as a plugin solution
- Quote, offer, bind functionality
- Payments and redistribution
- Policy administration
- FNOL claims submission and bespoke claims workflows

This allows insurers to launch and manage products entirely on the KASKO platform, integrate any third party data / tech services in a compliant manner, and integrate or replace any aspect of the KASKO platform with their own infrastructure.

The Oxbow Partners view

Traction: KASKO launched products with 14 insurers across Europe over the last 12 months. We think this demonstrates impressive marketing reach for a young business and a good understanding of the challenges faced by their target clients.

Potential: We are seeing more and more insurers and MGAs consider their core platform strategies. For the large players this involves thinking about niche platforms for specific products, innovations or markets. For smaller players it is the realisation that the 'household names' are not the only viable options. We think that KASKO is well positioned to capitalise on this trend.

The 2018 challenge: KASKO is subject to the corporate procurement and change cycle, which will remain the most significant constraint on its growth.

Year founded: 2015

FTE: 17

Operations

Investment to date: £1m

Key investors: Founders, Employees, Seedcamp, Hevella Capital

Public insurance customers:

Allianz, ARAG, AXA Travel Insurance, Baloise Group, Barmenia, Bavaria Direkt, GAV, Legal & General, Obvi, R+V, Swiss Re

Revenue growth 2016-17: 2500%

2017 revenue band: **£50k - £1m**

Current countries: UK, Germany, Switzerland, Canada

HQ: UK



collaboration with KASKO. Agile, quick and uncomplicated. Keep it up. **1**

Michael Muller, CEO, Baloise Switzerland

- The business's cloud-based solution does not require physical installation or setup and is built on open micro-service architecture; however operational process must initially be defined to determine if insurer system integration is required
- Optionally, KASKO consults during the product ideation and design phases; insurers provide the pricing & underwriting logic, documentation templates and select their distribution channels
- KASKO usually provides a managed service for launch and subsequently exposes self-service and development tools to ensure a quick time to market

Key Executives

Nikolaus Sühr CEO & Founder	Matthew Wardle CTO & Founder	Sergej Tolz CSO	Nicolas Chazal
 Senior Consultant at Zeb Business & Product Development at OCC and Funk Group 	 Technical Consultant at Accenture Software Developer at Kulu 	Enterprise Sales at BloombergStartup Founder	Senior Consultant at Zeb
Impact KASKO has brought over 20 produ market in the last 12 months with time-to-market of 2-3 weeks.		O-Baller Smartphone (CH) O-Baller Cyber (CH) O-Baller Cyber (CH) Bolarisibirekt Private Liability (DE) Bolarisibirekt Contents (DE) Solarisibirekt Contents (DE) O-Baller Watch - Al (CH) Britser O	Marine Various Products Marine Watch Insurance (CH) Marine Moving Insurance (CH) Marine Modular Travel (CB) Modular Travel (CB) Mo

Case Study 1

Client situation: AXA Travel Insurance wanted to minimise the time to market and cost of selling travel insurance through the long-tail of distribution channels.

Car (DE)

Additional Driver (DE)

Pokemon / Accident (DE)

What they did: KASKO digitised a modular travel insurance product on its platform, creating a bespoke REST API and a front-end that embedded the insurance proposition within the checkout and follow-up notifications of any digital channel (incl. dynamic pricing). Given its position as an MGA, KASKO also created an AR onboarding process to minimise the operational and regulatory burden.

Test Drive (DE) - Watch + AI (DE)

E Buyers Protection (DE)

O Bester Holiday (CH)

Impact: KASKO onboarded fintech and banking partners such as WeSwap and Starling Bank as a result of creating this plug and play solution.

Case Study 2

Client situation: Following initial success with D2C item insurances, Baloise Group wanted to create a comprehensive B2B2C proposition to attract new customers via affinity channels, including the ability for agents to onboard offline retailers as sub-agents.

What they did: KASKO scoped and implemented the pricing and underwriting framework to enable Baloise to price any product and any module individually and amend them at any time. KASKO also enabled Baloise to create different pricing and commission variants per product and distribution partner.

Impact: Within 4 weeks of launch, Baloise agents had already acquired over 100 retailers.

Future Applications

KASKO is focused on growing its platform and expanding internationally:

- **Product expansion:** Grow business lines from retail P&C to SME, health and life, with a focus on bancassurance, where they hope to leverage opportunities in mobile-first and open banking
- Tech improvements: Expand self-service and developer tools
- International expansion: Continue growth within Europe

Δ7

bvi Obvi (CA)

Ander Multi-Item (CH)

O ---- Element+ (DE)

In Cyber (CH)

CLER &-Inter Cyber (CH)

KRYON

SYSTEMS

Kryon offers a robotic process automation platform to automate manual insurance processes

Kryon's software has been implemented by large insurers (e.g. Allianz, USAA) and non-insurance clients (e.g. Microsoft, DXC Technology, Singtel)

Year founded: 2008

FTE: 75

Operations

Investment to date: \$20m

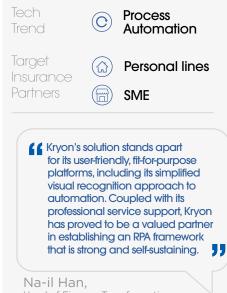
Key investors: Aquiline Technology Growth, Vertex Ventures

Public insurance partners: Allianz, USAA

Revenue growth 2016-17: Not disclosed

2017 revenue band: Not disclosed

Current countries: US, Germany, The Netherlands, Israel, India, Singapore



Head of Finance Transformation, Allianz SE Singapore

What do they offer?

Kryon's technology is used to optimize claims processing to increase efficiency and accuracy. It offers three products:

- Kryon Unattended Robots automates high volume, repetitive, time-consuming insurance processes
- Kryon Attended Robots runs on user desktops, executing tasks on user demand and/or monitoring user actions and triggering automation processes automatically
- Kryon Hybrid Automation allows humans and robots to work efficiently together, automating business processes end-to-end

The platform enables improved governance and regulatory compliance by producing a detailed log of automated activities (each step in the process is documented).

The Oxbow Partners view

Traction: Kryon has been implemented with multiple blue-chip insurance and non-insurance clients. Initial pilots suggesting dramatic decreases in error rates and higher efficiency look promising.

Potential: We believe that the effectiveness of Kryon's technology has been proven. With an investment from Aquiline Technology Growth, the VC fund of one of the world's best connected insurance-focused PE funds, we see potential to scale significantly in 2018.

The 2018 challenge: Kryon's technology is proven and it now has investment to help growth the business. The challenge will be finding enough insurers willing to deploy the technology at scale.

The Kryon platform incorporates the following components:

- Kryon Studio enables insurers to quickly develop and edit automation scenarios; the Studio lets business users record any process without programming skills or the need for time-consuming and costly integrations
- **Kryon Console** is a web-based management and monitoring dashboard that lets the insurer configure, schedule and manage the virtual workforce of Kryon Robots from anywhere, in real-time
- Kryon Application Server manages security and acts as the platform's repository

Key Executives

Harel Tayeb

CEO

- AVG Israel Country Manager (acquired by Avast for \$1.3B)
- CEO at Como (Conduit Mobile), a leading
 mobile app maker platform

Nathaniel Davidson

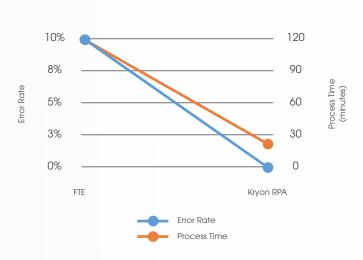
- CTO
- Engineering background with companies

such as Dell

CTO with multiple startup and growth businesses

Impact

The system has helped clients reduce process errors to almost 0, reduce labour costs (1 robot = 3 to 5 FTE) and expedite efficiency (e.g. claims payment processing reduced from 1.5 hours to 20 minutes)



Impact On Error Rate and Process Time

Case Study

Client situation: A large insurer needed to reconcile its customers' premium payments with bank statements, and then enter approved payments in the ERP system on a daily basis. Manually this process took 1½ to 2 hours per customer to execute.

What they did: Kryon implemented their RPA platform to reconcile the Excel files with the bank statements, verify/approve payments and then enter the information in the ERP system.

Impact: Using Kryon robots each payments is now processed in 20 minutes saving thousands of FTE hours per year. Automating the process also eliminated process errors.

Future Applications

Kryon will expand their product offering starting with Kryon's Process Discovery. This Al-powered analytics engine identifies all processes that can be automated to increase ROI, and provides smart analytics to help organizations continuously optimize process execution and virtual workforce productivity.

Vriskgenius

RiskGenius uses AI to automate the creation. comparison and review of policy documentation for brokers and insurers

RiskGenius's platform showed a projected time saving of 750 hours per employee during a POC with QBE. QBE will be launching RiskGenius across its North American operation in 2018

What do they offer?

RiskGenius's platform uses AI to 'read' insurance policies and categorises each clause by type (e.g. fire, liability). It then stores each clause in a computer-searchable format. Users can interrogate the data, for example: `show me all the war exclusion clauses in this portfolio'.

RiskGenius has several tools including:

- Comparison: Side-by-side comparison of polices and clauses
- Manuscripting: A policy creation tool allowing users to drag and drop clauses from a library of pre-approved clauses
- Analytics: A tool to analyse all policy documents (e.g. language trends over time)
- Compliance: A tool for reviewing and approving proposed policy language across other teams (e.g. legal and compliance)

view

The Oxbow Partners Traction: At this stage of development, we view pilots that lead to implementation at scale as strong indicators of impact. Rolling out with QBE in North America is a strong signal.

> Potential: A comment by Chris Cheatham on LinkedIn summarises our view very well: "(My trip to) London was amazing. It took two days for one very big learning to sink in: underwriters in Europe are empowered to manuscript with little or no formal approval process." We see RiskGenius as an important tool to monitor and control manuscripting in the London market in particular.

The 2018 challenge: With the London Market TOM project ongoing, RiskGenius will need to make sure it can get the attention of underwriters and IT departments to implement its technology.

Year founded: 2012

FTE: 26

Operations

Investment to date: \$5m

Key investors: **QBE**

Public insurance customers: QBE

Revenue growth 2016-17: Not disclosed

2017 revenue band: **£1m - £5m**

Current countries: US, Europe, Australia

HQ: Kansas, US



Al & Data Insight

Target Insurance Partners

Commercial Lines

The RiskGenius product will provide a platform for building better products and better meeting our customers' needs.

Group Head of Transformation, QBE

- Initial conversations start with a demonstration of the platform's capabilities
- The next step is a free testing period customers can upload six policies and begin to understand the software
- A proof of concept is launched across one product or line of business
- The final step is rolling out the product across the business

Key Executives

Chris Cheatham

CEO & Founder

- Surety Claim attorney at Watt Tieder
- Founder of consulting business, Cheatham Consulting and Law Office, Christopher W Cheatham LLP

Jeremy Smith

COO

- Associate at Houlihan Lokey Howard and Zukin, Investment Bank
- Chief Strategy Officer at SecondMarket

Impact

Analysis by QBE showed that RiskGenius saves certain groups of underwriters c.750 hours per week across a range of tasks.

Time (in hours)) spent per e	employee on	specific activities
-----------------	---------------	-------------	---------------------

Activity	Before RiskGenius	After RiskGenius	Time Saving
Comparing policies	3.0	1.0	66%
Drafting policies	7.6	3.8	50%
Drafting endorsements	9.7	4.2	57%
Searching policies	4.5	2.1	54%
Reconciling policies	3.5	1.5	56%

Case Study 1

Client situation: An insurer wanted to understand the content and find inconsistencies in 100,000 commercial general liability policies and endorsements.

What they did: RiskGenius applied machine learning to the policy library, identified the content of each clause and tagged clauses that were similar.

Impact: The insurer can now conduct analysis across the library of policies in seconds, identifying common clauses and variations.

Case Study 2

Client situation: An insurer wanted to define a methodology to identify specific clauses in a library of thousands of policies without having to review each policy individually.

What they did: RiskGenius loaded up policies for each line of business onto their platform. Underwriters then used Genius Search (a search tool for insurance policies) to identify matching clauses.

Impact: The insurer reduced manuscripting time, resulting in faster turnaround times and less underwriting leakage.

Future Applications

Product expansion: RiskGenius has just launched an automated policy checking tool. This allows them to:

- Extract policy numbers, limits, deductibles and premiums from applications, quotes, binders and policies
 - Instantly identify changes to renewals
 - Compare key policy items across carriers with ease



Qover provides a product platform to third parties to distribute insurance

Qover's model allows distributors to earn insurance revenue with relatively little integration and operational cost. It has attracted both non-insurance clients (e.g. Toyota, Deliveroo) and Belgian insurance brokers to its model

Year founded: 2016

Operations

FTE: 25

Investment to date: €7.5m

Key investors: Anthemis

Public insurance customers: AmTrust, Munich Re, Baloise

Revenue growth 2016-17: Not disclosed

2017 revenue band: >£100k

Current countries: Belgium

HQ: Brussels

Tech Trend Platforms / APIs Customer experience

Target Insurance Partners Personal linesSME

Qover offers us the possibility to integrate new insurance solutions into our offering quickly.

CFO, Toyota Belgium

What do they offer?

The company describes its model as `Insurance-as-a-Service': The objective is to give distributors the ability to sell simple products with little operational cost or involvement.

Target clients are non-insurance partners (e.g. car dealerships, sharing economy) and insurance brokers (as a means to sell non-core products easily).

Qover's first live product is a motor GAP policy but the team is in the process of assembling a 'library' of products, all available through APIs.

The Oxbow Partners view

Traction: Qover has established partnerships with some blue-chip partners in its home market, Belgium. It has secured capacity from some leading insurers.

Potential: We think Qover's 'Insurance-as-a-Service' model is an exciting way to think about distribution of non-core products by both insurance and non-insurance distributors. This platform forms the 'technology glue' between the customer experience of the distribution partner and the capacity. We see huge potential in affinity distribution.

The 2018 challenge: Qover needs to demonstrate at scale what its role in the value chain will be. Brokers will be a barrier for the non-insurance model, not least because of a possible reluctance by corporates to move from an established insurance partner to a startup. Some solid case studies from Belgium are needed to grow internationally. As customers for the 'Supplier InsurTech' model, we think brokers will be slow to engage given their reluctance to add to already complex IT infrastructures. Nonetheless, we do not doubt the technology opportunity in this segment and think Qover is a credible partner.

- Qover's library of white-label insurance products is made available via an open API. Partners integrate the Qover platform into their sales process (e.g. website, advisory process, POS process)
- The technology platform covers all segments of the value chain other than distribution
- Capacity is provided by AmTrust Syndicate 5820, Munich Re and Baloise; claims are handled by TPAs approved by underwriters
- Implementations can be completed in a couple of hours, with no integration costs

Key Executives

Quentin Colmant

CEO & Founder

• 9 years at Allianz

• Managerial roles in operations, underwriting, product creation and cross border integration

Impact

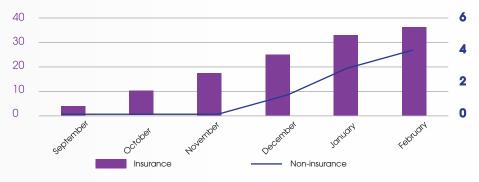
Qover has grown quickly over the past 6 months, acquiring both brokers (35 total) and non-insurance distribution partners (4 total).



COO & Founder

 9 years in private equity and consulting both in Europe and Hong Kong (Bain and Co. and NPM Capital)





Case Study 1	Client situation: Toyota Belgium wanted to offer a motor GAP policy alongside their existing insurance offering.
	What they did: Qover tailored its product to the specific client need in a matter of weeks. The full technical integration of the Qover insurance solution with the client's legacy system was implemented in under two hours.
	Impact: The client now offers a GAP policy to everyone who buys a car at its dealerships in Belgium.
Case Study 2	Client situation: The leading Belgian real estate website wanted to generate additional revenue by cross- selling insurance alongside their traditional business offering.
	What they did: Qover created a white-label insurance product, fully accessible via APIs, and integrated it into the customer's front-end.
	Impact: The client projects a significant impact directly on its bottom line.
Future Applications	Product expansion: Qover plans to expand its library to over 6 products during 2018.
	International expansion : As a Lloyd's of London Coverholder, Qover has European ambitions and already has the licence to sell in 32 countries. The process of expanding internationally will start in March when Qover launches in France – other countries will follow.



TradeIX provides a secure trade finance platform that facilitates access to the broader trade finance market, for all players

TradelX has a number of large organisations (e.g. Standard Chartered) and insurers (e.g. AIG) using its platform

Year founded: 2016

FTE: 45

Operations

Investment to date: Not disclosed

Key investors: Not disclosed

Public insurance customers: AIG

Revenue growth 2016-17: Not disclosed

2017 revenue band: Not disclosed

Current countries: UK & Ireland, France, US, Singapore

HQ: Dublin

Tech

Platforms / APIs

Target Partners

Insurance (😭) Trade Finance

By using this blockchain-enabled platform, clients are able to benefit from the extended ecosystem that trade finance brings, but with a reduction in friction and cost and an improvement in speed and transparency.

Marilyn Blattner-Hoyle Head of Supply Chain and Trade Finance, AIG

What do they offer?

TradelX provides infrastructure and solutions that enable parties to connect to the broader trade finance market more easily, flexibly and efficiently.

The platform uses permission-based distributed ledger technology. Companies that place their invoices on the platform give real-time visibility to parties to manage customer terms and risk. All invoice details (including eligible insured amounts) are stored on the ledger.

Invoices are sold to funding providers and credit is insured by insurance partners.

The Oxbow Partners view

Traction: The business aims to create the leading trade finance infrastructure platform connecting banks, insurers, buyers, sellers and other parties to any transaction. With over twelve major banks (e.g. BNP Paribas, Commerzbank) signed up to their Marco Polo JV with blockchain consortium R3, TradelX is well on its way.

Potential: TradelX has been set up by a team of trade finance all-stars including the founder of PrimeRevenue, a leading supply chain finance provider. With its early traction, we see that it has potential to become the prominent trade finance platform ahead of some other challengers.

The 2018 challenge: TradelX needs to move from testing and development to full implementations and scale in 2018. To do that it will need to onboard multiple institutions.

- Corporates, banks and credit insurers engage with TradeIX by joining the trade finance consortium
 Marco Polo or though an engagement with TradeIX
- TradelX reviews potential clients' current needs and trade finance infrastructure, their goals and their wider trade ecosystem
- TradelX gives clients the option of using their own existing trade finance solutions, choosing the ones offered by TradelX or developing their own using the developer tools from TradelX

Key Executives

Robert Barnes CEO & Founder

Andrew Berti

- CTO & Founder
- Software developer at JP Morgan and HSBC
- Founder of Geodiction, a service software consultancy

Daniel Cotti

CFO

- Chairman of Bolero
- Former Global Head of Trade Finance at JP Morgan

Estimated capital market spending by financial institutions, 2014-2019e

Impact

\$40 trillion Current volume for trade finance

• Founded PrimeRevenue Inc., a provider of

working capital financial solutions

• Founder of consulting business, Aradya

\$8 trillion

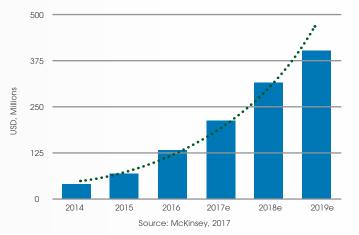
Current volume for open-account trade

\$3 trillion

Receivables on corporate balance sheets

770 million

Processed invoices electronically for B2B and B2G in Europe in 2015



Case Study 1

Client situation: A Fortune 500 logistics company wanted to combine their core offering with a trade finance solution that permitted extended payment terms for specific clients.

What they did: TradelX developed a blockchain-based trade finance platform, with finance provided by Standard Chartered and credit insurance provided by AIG. The company was able to place invoices on the TradelX platform, providing real time visibility to manage customer terms and credit risks.

Impact: The Fortune 500 logistics company increased payment terms for its clients while improving thier own working capital.

Case Study 2

Client situation: Member banks of the R3 network asked R3 and TradelX to help them implement new solutions for their trade finance ecosystem using R3 Corda distributed ledger technology. The consortium wanted to cut back-office costs, eliminate operational friction, reduce fraud and compliance risk and open up new revenue streams.

What they did: TradelX and R3 created Project Marco Polo as a joint undertaking, together with many of the world's foremost financial institutions.

Impact: The solution was an end-to-end open account trade platform powered by Corda distributed ledger technology. The platform consists of pre and post-shipment trade finance solutions including APIs and microservices and specific applications and core technology infrastructure.

Future Applications

Product expansion: TradelX plan to expand the Marco Polo initiative in 2018 to include additional banks and third party service providers such as credit insurers, ERP and logistics providers, leveraging the collaborative nature of the platform to create a fully interoperable open-sourced trade finance network.

International expansion: Further expansion throughout Asia and the US.



360Globalnet allows insurers to provide better claims experiences, including self-service portals, via a cloud-hosted digital platform

Data & Analytics

360Globalnet's platform has been adopted by insurers in the UK, USA and Australia (e.g. Direct Line and Allianz). Implementation has helped insurers cut operational cost, increase NPS, control claims spend and cut opportunistic fraud

Year founded: 2010

FTE: 50

Operations

Investment to date: £25m

Public insurance customers: **Direct Line, Allianz**

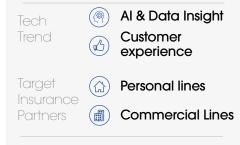
Key investors: DXC Technology

Revenue growth 2016-17: 5%

2017 revenue band: **£1m - £5m**

Current countries: UK, US and Australia

HQ: Surrey, UK



Since launching the platform we've experienced high levels of customer engagement and satisfaction, which is fantastic. Over the course of the year we'll be looking at other ways we can exploit the technology to help our customers.

lbi Moghraby Director, Business Change, Allianz UK

What do they offer?

360Globalnet provides innovative digital technology to help insurers deliver better claims experiences.

A SaaS digital claims platform is at the core of the business; users can upload any type of video or imagery which can be readily shared with suppliers. There is a sophisticated MI/ BI module for use by adjusters (e.g. including the ability to search and analyse any document or text).

Innovative claims propositions include the ability to access a network of independent claims adjusters via a `gig economy' model.

The Oxbow Partners view

Traction: 360Globalnet has meaningful revenue and contracts with leading insurers. The technology has been used to process 1.2 million claims transactions across the world in multiple languages. There have been 200,000 crowd-sourced claims visits and 100,000 live streaming videos have been uploaded.

Potential: The business has 15 client contracts and 14 concurrent live proofs of concept worldwide. DXC Technology is actively marketing the business to its 400 global insurance clients.

The 2018 challenge: Founded in 2010 and with £25m of funding, 360Globalnet needs to move swiftly from proofs of concept to implementations at scale in 2018. The strategic partnership with DXC Technology should help; indeed, it will be an interesting case study to understand whether Supplier InsurTechs are more successful selling 'through' an established strategic technology partner than selling direct.

- Implementations start with the creation of a bespoke proof of concept
- The technology is architected to work alongside legacy systems; clients are supported fully throughout implementation but the platform is readily configurable by business users
- Configuration is simple (implementations take days) and the platform is available on a pay-as-you-go basis

Key Executives

Paul Stanley FCII

CEO & Founder

- Experienced insurance claims professional and founder of five successful businesses
- Previously MD at InFront Solutions a subsidence claims management company

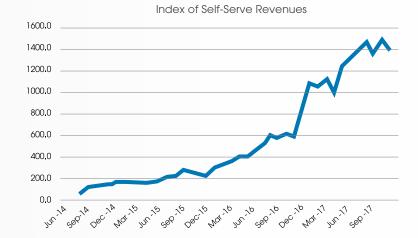
Simon Yun-Farmbrough

Executive Chairman

- Director of Strategy and e-Business at Prudential
- Partner at Boston Consulting Group

Impact

360Globalnet's revenue growth from implementations of its digital claims platform with clients between 2014 and 2017 has accelerated in 2017.



Case Study 1	Client situation: A top 10 UK insurer needed to assess 2,800 claims in Orkney, Shetland and the Hebrides during a storm event in 2015.
	What they did: 360Globalnet deployed their digitally-enabled network of agents, 'WithYouIn5', to visit and process claims for those policyholders unable to self-report due to extreme weather, loss of power.
	Impact: All claimants were visited and assessed in a two-week period, with exceptional feedback from policyholders; BAU claims were not impacted, despite increased volumes.
Case Study 2	Client situation: A Florida-based carrier needed a claims platform that allowed them to cope with the deluge of claims resulting from the worst hurricane in a decade.
	What they did: 360Globalnet deployed their claims technology within days of the hurricane.
	Impact: The insurer used 360Globalnet's digital platform to manage 3,000 claims in 3 days. Visits were reduced through better quality triage (validation) and inbound calls also fell. Customer feedback was excellent.
Future Applications	New product: 360Globalnet is deploying its video streaming service, 360LiveStream, which will allow vehicles to be inspected remotely. It aims to increase claims control, reduce fees and the time taken to settle a claim.



FRISS uses AI and machine learning to detect and prevent fraud, and secure compliance across underwriting and claims

Data & Analytics

FRISS's platform is used by 132 insurers in 26 countries. The platform increases fraud detection by 30% and promises a 5x ROI to clients

Year founded: 2006

FTE:100

Operations

Investment to date: €17m

Key investors: Aquiline Technology Growth, Blackfin Capital Partners

Public insurance customers: Aegon, ERGO, Generali

Revenue growth 2016-17: 25%

2017 revenue band: **£5m - £10m**

Current countries: Europe, US, Latin America

HQ: The Netherlands

Tech (Trend

AI & Data Insight

Target Insurance (A) Personal Lines Partners



Supervisor Claims Management Anadolu Sigorta

What do they offer?

FRISS's platform uses AI and machine learning techniques to detect and prevent fraud.

The SaaS platform generates the 'FRISS Score', a measure of risk for each quote, policy or claim, allowing insurers to increase straight through processing (STP) and support digitisation.

The business's ready-to-use products include:

- **Risk assessment:** Fraud evaluation of customers at point of underwriting
- Claims fraud assessment: Automated fraud detection in the claims process, making an objective estimation of the risks related to a claim

The Oxbow Partners view

Traction: Founded in 2006, FRISS is not your stereotypical InsurTech (and required us to waive the eligibility criteria about the date of incorporation). FRISS has spent the last ten years growing steadily and internationally. Growth has accelerated in the last four years as data-driven propositions have captured the industry's attention.

Potential: FRISS has built stable technology foundations and we believe it is ideally positioned to benefit from continued interest in data-driven propositions over the near term. The investment by Aquiline's technology fund in 2017 will help it extend its client reach.

The 2018 challenge: With 100 employees, FRISS's forecast growth will see it transition to beyond the `new business' size band. The challenges of growing beyond 100 employees are well documented – by Roman military historians onwards.

- Clients integrate FRISS's system, which is largely pre-built and ready-to-use (with some out-the-box indicators and scoring mechanisms) into their existing architecture
- The solution integrates into existing core systems, with technical go live possible within 2 weeks
 - The system must be implemented for 2 to 3 months to generate bespoke risk indicator scores based on historical data
- After go-live, FRISS has a value-cycle methodology to keep scores as accurate as possible

Key Executives

Jeroen Morrenhof

CEO & Founder

- Founder and Partner at Mobilee Consultancy
- Mentor and investor at Rockstart

Christian van Leeuwen

CTO & Founder

 Consultant at Bolesian (sold to Capgemini), Kodison and Mobilee

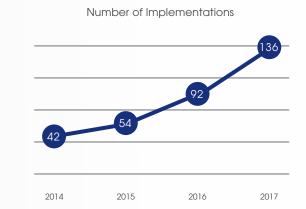
Marc Mulder

ССО

- VP Sales at Mirror42 (sold to ServiceNow) and VP sales at Service2Media
- Sales manager at IBM and SAS

Impact

FRISS's client list has grown steadily in the last 4 years with the total number of implementations now standing at 136.



Case Study 1	Client situation: Turkey's largest P&C insurer (14% market share and c.\$750m motor GWP) experienced difficulties detecting claims fraud.
	What they did: FRISS's platform was implemented to automate the fraud analytics process (i.e. automatically detect fraud in core processes and reveal similarities between claims).
	Impact: Within 6 months of going live, the business achieved a 1,200% ROI.
Case Study 2	Client situation: A large reinsurer wanted to support its Latin American clients with an anti-fraud solution that reduced claims ratios.
	What they did: FRISS was selected from a list of over 30 vendors and started working with their clients, delivering real-time claims fraud scores.
	Impact: FRISS now delivers fraud solutions to all of their Latin American customers, a solution which benefits the insured, the insurer and the reinsurer.
Future Applications	 System development: FRISS plans to continue developing its platform, utilising a combination of in-house and external data to build new AI products, such as a self-learning claims fraud model. The business aspires to: Increase STP of claims to 80% Achieve a 4% reduction in COR by tripling proven frauds Leverage data from IoT and telematics



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

RightIndem's platform has yielded impressive results in pilots (e.g. 62% increase in renewals when customers have used processes supported by their technology) and the platform is live with 2 insurers. The business's initial focus is on motor and marine cargo insurance claims

Year founded: 2016

FTE: 25

Operations

Investment to date: £2.2m

Public insurance customers: Not disclosed

Key investors: EOS Venture Partners

Revenue growth 2016-17: 400%

2017 revenue band: **£50k - £1m**

Current countries: UK, US

HQ: UK

Al & Data Insight Tech Customer experience Target Personal lines Insurance SME

By looking to give back control to the policyholder, providing a transparent costing process, offering effective repair solutions and managing claims efficiently as they come through their system, it is not surprising that RightIndem have been able to tangibly reduce expense ratios and improve customer satisfaction and retention rates for insurance companies.

Andrew Johnston Willis Re

What do they offer?

RightIndem's claims SaaS platform has three main components, all facilitating customer self-service:

- Notification: An FNOL solution allowing customers to share incident data with a claims handler in real time; and a fully online FNOL notification solution ('electronic notification of loss', or ENOL)
- Core claim: Web app-based claims management, total loss and repair functionality modules
- Settlement: Payments, repair and replacement functionality with features such as payment scheduling to improve reserving

The Oxbow Partners view

Traction: RightIndem was a product of StartupBootcamp's first (2016) cohort. The business struggled with the inertia of the industry initially, but has gained momentum in 2017. They are one of only a handful of emerging, specialist ClaimsTech businesses.

Potential: We think the most significant RightIndem data point is the 14% reduction in indemnity spend that they achieved in one pilot. With loss ratios of 80%+ in UK motor, for example, this is where insurers have the potential to feel significant economic benefit. We believe the RightIndem technology could be gamechanging for insurers of high volume lines.

The 2018 challenge: RightIndem has built a compelling proposition and has delivered proofs of concept in multiple lines including motor and marine. However, it is yet to implement at scale. We see 2018 as a critical year for finding its core 'product market fit' and establishing a revenue foothold in the market.

- RightIndem provides a set of B2B2C SaaS claims modules that are accessible via robust industrystandard APIs
- Implementations can be completed in under 16 weeks and have shown 14:1 ROI realisation within 9 months of the 'go-live' date

Key Executives

David Stubbs

CEO & Founder

- CEO and co-founder
- Experienced automotive and claims professional
- Founded ETWB in 2005, a business focused on total loss claims
- Consultant with AT Kearney's financial services practice

Graham Blaney

COO & Founder

- Founder of Buying Butler, a Microsoft-backed startup
- Tech experience in business process & IT outsourcing (BPO & ITO)

Impact

RightIndem's platform has delivered a 10x improvement in claims handler productivity, a 14% reduction in indemnity and a five-fold reduction in elapsed claims time.

Importantly, customer renewals have also increased by 62%, when compared to existing, non-digital claims processes.



Case Study 1

Client situation: A motor insurer wanted a tool that digitised total loss claims and reduced 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 a benefit of >£116 per case due to an increase in processing speed.

Case Study 2

Client situation: A marine insurer wanted to digitise their marine claims process.

What they did: RightIndem implemented a bespoke ENOL module that allowed brokers and customers to report and self manage claims.

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

Future Applications

RightIndem plans to add new features and functionality that pave the way towards automated claims settlement across volume claims. Specific features in development include:

- Supply chain repair allocation tool
- Al fraud detection module that transcribes videos and audio of customers describing their claim and provides a detailed fraud score

Shift.

Shift Technology uses artificial intelligence to detect claims fraud

Shift Technology's SaaS platform is used by over 50 insurers worldwide; whilst working with an insurer in Asia, 80% of cases marked as potentially fraudulent by its technology were verified as such by handlers

Year founded: 2014

FTE: 96

Investment to date: \$40m

Key investors: Accel Partners General Catalyst

Public insurance customers: **Not** disclosed

Revenue growth 2016-17: **800%** Source: TechCrunch May 2016-Oct 2017

2017 revenue band: >£1m

Current countries: **Europe, US, Asia, LatAm**

HQ: Paris

Tech Trend

Al & Data Insight

Target Insurance

Personal lines SME

With the Shift interface, it takes us less than three minutes to see exactly where we need to focus our investigation of the case. The information is very clear.

Executive Tier 1 Spanish Insurer

What do they offer?

Shift Technology's SaaS fraud detection solution, Force, uses AI to detect a wide spectrum of fraudulent behaviours across P&C, travel, life, and health insurance.

Force is embedded into the client's claims process and works by analysing and scoring claims data for potential fraud; the AI becomes better at detecting fraud over time.

`Fraud alerts' are sorted and flagged to claims handlers with clear, concise and actionable explanations.

The Oxbow Partners view

Traction: Shift Technology is not the noisiest InsurTech but it is certainly having an impact. With over 50 clients, it is blazing a trail. According to TechCrunch, revenues grew 800% between its Series A round (May 2016) and Series B (October 2017).

Potential: Insurers are investing considerable time and effort automating the claims process. US startup insurer Lemonade has turned up the heat on insurers with its well-publicised claim to have set a world record for claims settlement (three seconds). The limiting factor on claims automation will be the ability of machines to detect fraud – and as such we think Shift Technology is well placed to become an increasingly important component of any insurer's claims process.

The 2018 challenge: Claims fraud is an increasingly competitive space. Shift may be about to enter a tricky phase of growth where it is sufficiently established to no longer to have the novelty factor of some of the newer InsurTechs, but also does not have the scale to compete against the established industry titans. It's a nice problem to have to solve.

- The SaaS platform can be used by insurers on a pay-as-you-go model
- Implementations start with a team of data scientists from Shift, who have experience of the client's situation and the local fraud environment, being sent to the client
- The data scientists identify potential fraud scenarios and configure the platform to identify these
 - Claims data is sent to the Shift platform in clients' preferred format; following analysis, both
- quantitative and qualitative results are made available to claims handlers on Force's web interfaceOnce implemented, future maintenance, updates and enhancements are deployed without any

Key Executives

Jeremy Jawish CEO & Founder

• Strategist at Goldman Sachs

• Quantitative modelling and fraud Detection

Virginie Haas

client intervention

- Chief Revenue Officer
- Current Board Member at Ubisoft
 - VP, IBM Cloud Service Sales at IBM

Peter Haslebacher

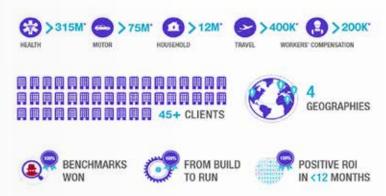
- COO APAC
- COO at Sunguard Insurance Solutions
- Head of Global Strategic Alliance at Insurance FIS

Impact

at Axa

Since founding in 2014 Shift Technology has processed over 400 million claims for over 50 clients across health, motor, household, travel and workers compensation insurance.

Shift Technology key achievements



Case Study 1	 Client situation: A tier 1 Spanish insurer wanted to identify fraud in its motor portfolio. What they did: Shift deployed a team of data scientists to tailor the Force platform to meet the specific needs of the client. Impact: Since going live, over 1,000 claims identified by Force have been proven fraudulent, significantly improving the client's fraud detection rate.
Case Study 2	Client situation: A global insurer wanted to implement a fraud detection solution in an Asian country. What they did: Shift conducted multiple workshops with the client to determine potential fraud scenarios.
	Shift's data scientists synced the algorithms with these scenarios. Impact: Shift achieved a hit rate of 80% (i.e. 80% of claims flagged by the platform were deemed suspicious upon further investigation) and the insurer has implemented Force into other lines of business.
Future Applications	Shift Technology is launching an automated claims processing tool. This will allow clients to use an algorithm to replace the deductive reasoning of claims handlers, streamlining the claims process and reducing end-to-end handling times.





Tractable provides artificial intelligence for motor claims

Tractable has been adopted by top 10 insurers in Europe and the US to fully automate their claims

Year founded: 2014

Operations

FTE: **40**

Investment to date: \$10m

Key investors: Zetta VC, Ignition VC

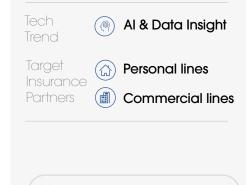
Public insurance customers: Ageas, Mitchell

Revenue growth 2016-17: 1,000%

2017 revenue band: £1m-£5m

Current countries: UK, France, The Netherlands, US

HQ: London



Tractable have developed groundbreaking technology using AI, which will improve the entire customer experience as insurance companies harness the benefits.

Andy Homer, former CEO, Towergate

What do they offer?

Tractable's AI is able to assess damage to a vehicle based on images and instantly estimate the cost of repair without any human bias and at lower cost than traditional peopleled operations.

Tractable's technology changes the customer claims experience: Customers take a picture of the damage and send it to Tractable. Tractable's algorithms generate the estimate of the damage and run anti-fraud checks, allowing insurers to expedite the claims settlement process.

The Oxbow Partners view

Traction: Tractable created considerable buzz in the InsurTech community in May 2017 when they announced that they were moving to a productionscale implementation with Ageas in the UK. We believe that Tractable was one of the first InsurTechs to reach this milestone in Europe.

Potential: Insurers are investing considerable time and effort into their claims processes. Tractable is well positioned to capitalise on this area of investment.

The 2018 challenge: For simple motor claims, Tractable will need to grow fast and stay ahead of the mounting competition. Tractable will also almost certainly reach a point where it diversifies away from motor claims. At that point we will discover to what extent AI can be applied to other lines of business where there is often less data to train algorithms, and more complex claims.

Tractable has a two step approach:

.

- In the first phase of an engagement, Tractable proves the value of AI in a subset of past claims, usually a few hundred thousand
- In the second phase, Tractable inserts AI into the client's workflow, processing live claims either concurrently or in parallel

Key Executives

Alex Dalyac

CEO & Founder

- Machine Learning at Imperial College
- Top 0.5% read at academia.edu

Razvan Ranca

- CTO & Founder
- Machine Learning at Cambridge
- Supervised by Zoubin Ghahramani (Head of Cambridge ML and Chief Scientist at Uber)

Adrien Cohen

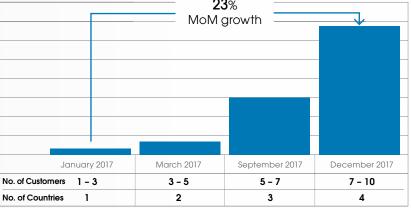
CCO & Founder

- M&A at Goldman Sachs
- Co-founder Lazada (\$3bn exit to Alibaba)

Impact

Tractable's annual recurring contract revenue grew over 10x from 2016-2017.

Annual Contract Valu	
23%	



Case Study 1	Client situation: A top 5 UK insurer needed a solution to control rising motor repair costs.
	What they did: Tractable integrated its AI into the client's motor claims handling workflow, allowing bodyshops to receive real-time feedback on their repair estimates.
	Impact: Tractable helped to change bodyshop behaviour and reduced overall repair costs.
Case Study 2	Client situation: A top 3 French insurer had visibility over only 2% of their bodyshops with their manual audit processes.
	What they did: By partnering with Tractable the client was able to score all of their motor claims costs and have full visibility over their repairer network's performance.
	Impact : The client now has a dynamic view of all their repairers and is able to manage them more effectively.
Future Applications	Customer expansion: Tractable plans to grow its customer list and work with large carriers in both Europe and the US.
	Process more claims: Tractable plans to process the totality of their customer's claims, soon after integration

Appendix: Methodology for choosing the InsurTech Impact 25

We wanted the Impact 25 to showcase technology-led businesses that on the one hand could point to real traction but were still 'emerging'. You might call them the raw, undiscovered gems. To do this we chose revenue measures in our eligibility criteria:

- Minimum £100k recognised European revenue in 2017 from insurance clients
- Maximum £10m recognised global revenue in 2017 from insurance clients

We had four further criteria to ensure we captured the right companies:

- Established before 1 January 2017, but after 1 January 2007
- For companies operating mostly outside Europe, evidence that there is a plan to focus on Europe in 2018
- A proposition that is technology-led and somehow innovative
- A shareholder structure that means the company is operationally independent of any major corporate

Companies did not need to meet all of the criteria, but companies needed to fulfil the spirit of our methodology.

In total, just over 50 companies entered via our website and augmented our internallyselected candidates. The subsequent selection process was a combination of two factors:

- Traction
- Potential

We had hoped that traction could be based on a 'hard' metric such as revenue growth, a common KPI in this kind of exercise. However, this turned out to be difficult, largely because InsurTech is such an embryonic category. For example, many entrants had only one or two years of revenues, meaning that revenue growth was not representative or comparable. We looked at actual revenues and revenue growth as an input rather than a filtering criterion.

Our subjective assessment of each company's potential was therefore a more important measure in our selection process. We assessed each business's proposition and strategy, performance and team in detail. In many cases we were able to draw on our understanding of the business from up to two years of coverage on our 'Bitesize InsurTech' blog.

We have no doubt that we have missed some Fords and included some Tinchers (as we describe stars and companies that fade in Section 1). But who ends up a Ford and who ends up a Tincher is not pre-determined. Our objective for this report was to be able to reflect in the InsurTech Impact 2028 that we were the first to spot the future winners.



www.oxbowpartners.com www.oxbowpartners.com/blog



@oxbowpartners

www.linkedin.com/company/ oxbow-partners-consulting

www.oxbowpartners.com www.oxbowpartners.com/blog

Experience-led advice for the insurance industry Strategy | Digital | M&A

