# Innovation in the insurance industry

**Paper 2016**

## Contents



The following content was prepared through a series of surveys, roundtables and interviews with Airmic members and Airmic sponsors. Airmic would particularly like to thank the following organisations for their contribution; Arthur J Gallagher, Axa Corporate Solutions, FM Global, Lloyd's, Marsh, Munich Re, Swiss Re Corporate Solutions, Tokio Marine Kiln, Willis Towers Watson and XL Catlin.

# 1 Introduction

**The Objective of this paper is to understand the insurance industry's approach to innovation. Our research has identified a substantial and growing appetite amongst insurers and brokers to produce innovative responses to emerging client needs. This paper aims to identify the challenges faced by insurers when trying to innovate and considers how members can work with their insurers and brokers to achieve the best result possible.**

**The need for innovation within the insurance industry is an ongoing discussion point for Airmic members, insurers and brokers. Innovation is important to the industry for a number of reasons:**

- Insurers, brokers and Airmic members are looking for insurance cover that meets the changing risks of businesses and the world they operate on, particularly as business models shift towards a greater reliance to intangible assets, which don't necessarily have the protection through traditional insurance covers.

- Insurers are aware that innovation has the potential to enhance their business models and lead to competitive advantage and growth, particularly as the soft market continues to persist.

- Insurers and brokers are conscious that the industry has essentially operated through the same business model for over a century, and therefore the potential for disruption from new entrants and new technologies is a growing concern (as is already being seen in the personal lines markets).

Perhaps unsurprisingly, "the ability to manage change" was the largest rising concern for the insurance industries according to the (PwC Insurance Banana Skins survey 2015), as insurers, brokers and observers become increasingly concerned about the changing risks and technologies. However, despite the mutual awareness of the need for innovation from all parties Airmic members report that 'lack of innovation' is their greatest concern with regards to the market *(Airmic pre-conference survey 2016)*.

This paper aims to understand why a gap exists between the apparent focus on innovation, and the level of innovation seen by Airmic members. Airmic endeavoured to understand the concerns of its members through a survey and a number of interviews and roundtables. A variety of insurers and brokers were interviewed to provide a view on how they approach innovation, and the challenges they face when doing so.

## 2 What does innovation mean to the insurance industry?

**The term 'innovation' can be interpreted in a number of different ways and therefore can be easily misunderstood. The Oxford dictionary defines innovation as 'the action or process of innovating, a new method, idea or product.' Within the context of the insurance industry, this can be interpreted as:**

1. Developing new products and services
2. Amending or improving existing products and services to enhance efficiency and productivity
3. Improving internal processes and systems
4. Introducing products and services into new customer segments and regions

> *"Lloyd's defines innovation in several 'buckets' - doing things better, doing things differently and doing new things entirely. All three fall within the innovation strategic goal for Lloyd's and are critical in ensuring the Lloyd's and London markets remain relevant and retain their status as the most creative insurance market."*
>
> **Gavin Steele, Executive Sponsor for Innovation at Lloyd's**

61% of insurers identify either enhancing or developing products and services as their primary growth strategy over the next two years (The insurance innovation imperative, KPMG 2015). The KPMG research identified that there was a greater focus within insurers on operational innovation than on development of entirely new products and services, which can be critical to growth. However, insurers report that this focus is appropriate as improvements to internal systems and processes are absolutely necessary for them to be in a position to research and develop new solutions - the long-term aim.

The success of gradual enhancements to products, services and systems is recognised by the Airmic members and brokers.

*"Innovation is not just about inventing new products and services but also about regular challenge and incremental improvement. We work with our clients in carrying out regular risk reviews to understand how their risk profile is changing and use this information to ensure their risk transfer programme continuously evolves and remains fully fit for purpose. The insurance market generally responds well to this continuous improvement approach."*

**Matthew Bates, Head of Risk Advisory, Major Risks Practice, Arthur J. Gallagher**

This paper will focus primarily on the developments of new products and services, which is a major concern to Airmic members. Only 6% of members advise that they are very satisfied that the insurance industry covers the risks most critical to them *(Airmic pre-conference survey 2015)*.

**“Rather than looking at a patchwork of separate insurance products, we ask clients to simply identify what events can disrupt the income streams for their business. These can then be provided as a ‘wish list’ of risks or perils to be insured...”**

**Thomas Hoad**
*Head of Innovation at Tokio Marine Kiln*

## 3 Airmic member views on innovation

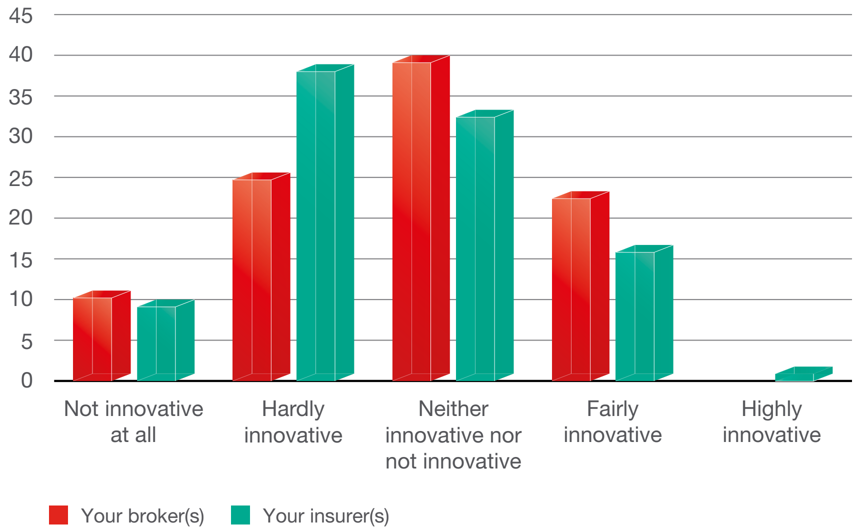
**Airmic asked its members for their opinion on innovation in the industry in March 2016. It's important to note that although opinion was not positive in general, there was a wide spread of views, which Airmic went on to investigate.**

Chart 1 shows that 49% of members believe their insurer(s) is 'hardly innovative' or 'not innovative at all' in developing relevant covers, and only 1% view their insurer(s) as 'highly innovative'. Members viewed brokers slightly better, with 36% of members believing their broker(s) is 'hardly innovative' or 'not innovative at all' in developing relevant covers, but not one member viewed their broker(s) as 'highly innovative'.

*However, many members did recognise that there are a few insurers who are proactive in terms of innovation. "There are a few front runners and genuine leaders. However, there appears to be a bit of a sheep mentality."*

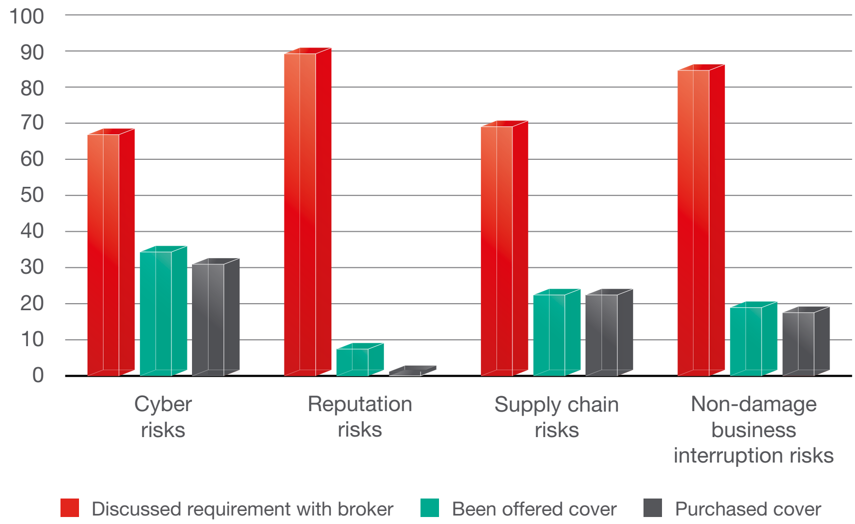
**Airmic member**

**Chart 1:** How innovative do you believe the market is in developing relevant covers?



Airmic asked members for their views on the cover available for four areas of risk repeatedly raised as ‘keep awake at night’ concerns for members, cyber, supply chain, reputation and non-damage business interruption. Chart 2 shows that the majority of members had discussed the requirement for each of these risks with their broker. However, there was a significant drop in the number who were subsequently offered and then purchased cover.

**Chart 2:** How have you approached obtaining relevant cover for the below risks?




For those members who had not purchased cover, there was a general view that the solutions offered weren’t relevant to the real risk. For all four areas of risk investigated ‘breadth of cover’ was listed as the primary area of change needed to make cover more relevant.

> *“I’m concerned that currently ‘innovation’ appears to involve insurers developing new products without a full understanding of the client risk map and their risk management processes. Additionally, for these types of risks, we are frequently asked for huge amounts of management information which is often not held by the business, as this is a new risk area for us too. When we are unable to provide such information, the conversation quickly dries up.”*
>
> **Senior Manager Insurable Risks, Financial Institution.**

## 3.1 The internal challenge for airmic members

**Even where covers and solutions have been offered Airmic members report a number of internal hurdles when hoping to purchase cover.**

In particular, getting sign-off from the rest of the business is a serious issue, often driven by the price of cover in comparison to more traditional covers. Whilst Airmic members appreciate that cover for new risks is likely to be relatively expensive, a business environment where budgets are repeatedly cut year on year means making a business case for a high premium where previously there was no spend becomes a significant challenge.

There was a general perception that cover should be made simpler to understand, in order to get sign-off from the business. Several members quoted that for complicated risks such as cyber risk the elements of cover are difficult to grasp, making cover comparisons incredibly difficult to assess. For risks such as cyber risk, environmental risk and political risk, this confusion can mean that organisations often believe they are covered when they actually aren't.

*"We have been struggling to purchase cyber cover as no broker or insurer has been able to describe their cover in terms of real historical losses and claims. If specific events e.g. a major hack were explained in terms of cause, timeline and business impact, and each of these were mapped against the currently available cover, this would make purchase and sign off far easier. Where cover isn't available this would also highlight the areas where internal control and risk management is needed."*

**Business Continuity Manager, Technology**

Several members report that their organisation's focus is on risk management controls, processes and systems rather than purchasing insurance, which they are often resistant to. Over 75% of members had developed a risk management strategy outside of purchasing insurance for cyber risks, and 61% for reputational risks. There is a general view from insurers that insureds are becoming more comfortable with retaining risk, whilst some insurers are becoming more risk-averse - although there is plenty of opportunity to close this gap.

*"The view of senior management for risks such as reputation and cyber is that even if cover were to be purchased, the risk is still ours - its only then financial impact that would have been transferred. The business has no appetite for losses in these areas, and understandably they prefer the budget to be spent on preventing the risk from ever manifesting."*

**Airmic member**

The lack of support from the business means that insurance managers may not be given the time and resources to really understand these risks, which is so critical in being able to obtain relevant cover. Airmic was surprised to see that less than half of members had carried out scenario analysis for each of the risks investigated. However, Airmic members recognised that these risks are so unique to the business that standardisation is almost impossible, meaning that a proactive approach from the insured, supported by the broker and insurer in enterprise-wide risk assessment, is required. Close collaboration within the organisation, between the enterprise risk managers and insurable risk managers is also useful in developing the appropriate balance between risk transfer and internal risk control.

## 4 How do insurers approach innovation?

**Airmic interviewed a number of insurers to understand how they approach innovation, and why innovation can be difficult. All insurers commented that innovation requires real time, commitment, resources and support, and accountability for innovation at the top level of insurers is critical. A commitment to identifying and developing individuals who are able to create new ideas and drive change will be vital. However, 71% of insurers advised that lack of investment and cost pressures are an internal challenge to innovation (The insurance innovation imperative, KPMG 2015)**

> *"The creation of new products requires energy and imagination. Strategic leadership is needed to support the investment in research and development for what might be considered an 'uncertain proposition'. Lloyd's is committed to helping syndicates in the development of innovative products."*
>
> **Nick Beecroft, Manager, Emerging Risks and Research at Lloyd's**

## 4.1 Routes to innovation

**Insurers tend to approach the production of new covers in the following ways**

- Market research of client needs, and creation of a product internally
- Enhancing an existing product in response to the changing needs of an existing client e.g. through bolt-on cover and service enhancements
- Creation of an entirely new product by working side by side with a client who has raised new and specific risk needs.

The third option is thought to be the greatest opportunity for radical innovation. However, it requires genuine collaboration between the insurer, broker and insured to develop a mutual understanding of the risks. The insurer will need to drill into the assets, liabilities and profit streams of the business, and understand what disrupts those streams and therefore the balance sheet, and how it can be measured. It was commented that insurance managers traditionally have a property or casualty background and therefore engaging the rest of the business will be necessary when understanding intangible assets and risks. Members should be prepared to 'open up the business' to their insurer and share proprietary information, and therefore confidentiality agreements can be critical.

*"Although Swiss Re holds extensive data to allow modelling of risks, it is likely that bespoke covers will require large data requests from the client. We work with risk and insurance managers to engage the rest of their business, often including finance, marketing, operations and risk specialists. Engaging Board representatives early in the process assists in demonstrating the value of the cover too."*

**Marc Davis, Head UK, Ireland & MENAat Swiss Re Corporate Solutions**

This work can take many months and won't always result in immediate premium income if the organisation can't accept the quoted premium. It's therefore important that the insurance manager has consulted with the Board at a very early stage when investigating cover. Alternatively, having the insurance manager sit within the finance team can be beneficial when evaluating the pricing and gaining support.

*"Where clients have purchased bespoke covers, the insurance manager has often already reviewed the risk register with the Board, highlighting the risks the organisation wishes to transfer and clearly understanding exactly where time and budget can be invested."*

**James Martin, Broker and Client Relationship Manager at XL Catlin**

## 4.2 Cross-class strategies

**All insurers interviewed advised that innovation is seen as one of the best opportunities for growth and therefore is a main strategic focus. The majority of insurers have appointed or recruited individuals as leaders or ‘champions’ for innovation. These individuals or teams tend to have cross-class responsibility as it is widely recognised that the traditional insurance class silo structure inhibits agility. However, whilst innovation hubs or champions can help develop individual ideas, it is important that a firm-wide culture of innovation is also developed. All employees should be incentivized to focus on meeting the requirements for customers, rather than on selling particular products or services.**

*“We recognised an increasing demand for products that weren’t off the shelf and we developed our special enterprise risks team seven years ago. Our focus is on understanding how a combination of risks can contribute to a loss for the business and developing tailored solutions to meet our client needs. However, the underwriters of our traditional products also have a mandate to recognise important issues and areas of concern for clients. These underwriters may be more familiar with the client, and can ensure that special risks are brought to our attention and are addressed.”*

**Claudia Hasse, Head of Special Enterprise Risks at Munich Re**

Insurers recommended that insureds also avoid the traditional insurance class silo approach when reviewing their risks and simply ask themselves ‘what fortuitous events can stop the organisation from meeting its corporate objectives?’

*“Rather than looking at a patchwork of separate insurance products, we ask clients to simply identify what events can disrupt the income streams for their business. These can then be provided as a ‘wish list’ of risks or perils to be insured, and whilst not everything can always be covered, underwriting by this method means all pertinent risks are fully considered together, often resulting in a broader and more commercially relevant insurance.”*

**Thomas Hoad, Head of Innovation at Tokio Marine Kiln**

## **4.3** Developing non-standard covers

**Despite member concerns and insurer challenges there have been significant advances in cover. When developing a cover, an effective tripartite relationship between broker, insurer and insured is needed initially to determine the triggers for the policy, i.e. the wish list of what is considered a disruption to the business and its revenue streams.**

The largest challenge for insurers when trying to produce new covers is the collection of relevant exposure data to model the risk. Whilst the frequency of these events can typically be determined using insurer data, the severity of these events is more client and situation specific. The revenue stream itself is the client asset and the information to assess this may not always be available to the insurance manager. A growing solution is the use of parametric triggers, where a specific parameter or index is used to substantiate that there has been a loss event. An agreed amount based upon the impact, e.g. percentage of cancelled flights, or the parameter itself, e.g. the temperature drop in degrees, is paid out immediately, although some insurers continue to pay out on an indemnity basis following the event. A number of insurers are developing such covers, particularly for non-damage business interruption risks triggered by weather changes and events that can lead to a loss of attraction. The benefits of parametric triggers is the quick and formulaic pay out that protects the client’s liquidity.

Where parametric triggers aren’t appropriate the increased sharing of business information is critical, although insurers are aware that this can sometimes put off clients. However, covers for reputation, non-physical damage business interruption and all-risks loss of attraction have been sold. For all, exposure and scenario analysis and statistical and actuarial modelling are likely to be required, and the necessary data collection can be relatively time-consuming. Insurers and brokers suggest that where possible, insureds can make use of the captive.

> *“The captive can provide the perfect ‘test-ground’ for emerging and developing risks. We are finding a growing number of insureds using fronted captives to gather data on the frequency and severity of their non-damage business interruption losses. Both parties can learn about the issues and exposures of the risk, supporting future innovation.”*
>
> **Caroline Woolley, Business Interruption Centre of Excellence at Marsh**

## 4.4 Market-wide developments

**Although bespoke and tailored products are often the first step towards innovation, market-wide developments are required for sustained progress. Many insurers interviewed advised that cyber cover has developed into a standard purchase for many organisations. However, this is often as an add-on to the non-standard polices, and the limits required by larger organisations are often not available. There is a balance required between bespoke covers and a sustainable market.**

> *"We worry that consistency of covers across providers would actually inhibit competition and innovation. However, flexibility to support a subscription market from several providers is desirable."*
>
> **Airmic member.**

The bespoke trend for solutions will not always work as clients will require more than just one carrier as the uncertainty in emerging risks and the lack of historical data prevents many insurers from offering significant capacity. This issue is compounded by the increasing level of financial regulation imposed on the insurance industry, and indeed regulation is recognised as the greatest risk facing the insurance industry for the third year running (PwC Insurance Banana Skins survey 2015). The high cost of capital requirements, and the cost and management distraction of compliance are considered as damaging to growth, profitability and innovation.

Market-wide initiatives are likely to help drive the much needed increase in capacity. An example is the recent collaboration between Lloyd's and modelling firms AIR Worldwide and RMS/Cambridge. This has resulted in a common core set of data requirements for cyber risks. It is hoped that these will support a standard quantification of risk and therefore more consistency in covers.

> *"Due to the growing importance of this risk class [cyber], quality standardised exposure data is critical for increased levels of insurance coverage and better risk modelling."*
>
> **Tom Bolt, Former Director of Performance Management at Lloyd's**

## **4.5** The use of technology and data

**Technology was quoted by insurers as both a potential disrupter to insurer business models, but also as an important supporter of innovation. Insurers are looking to develop tools to make better use of the big data that is available to them. This will reduce the uncertainty in accepting these risks, which should lead to more appropriate pricing decisions. 43% of insurers have partnered with academics, technology firms and third parties to support their innovation through new technologies and systems (The insurance innovation imperative, KPMG 2015).**

*"Supply chain risk is becoming the 'new cyber' and we are focused on using new technologies to map out and track the supply chain. Although we accept that you can't ever completely map out the supply chain to unlimited tiers you can establish the risk to a sufficient degree where you understand the supply process. This allows us to create a meaningful product."*

**Claudia Hasse, Head of Special Enterprise Risks at Munich Re**

A growing number of insurers and brokers continue to produce risk tools and systems that assist insureds in the process of assessing and reviewing their risks and exposures, and improve service delivery at the underwriting and claims stage. These improvements in the efficiency of more traditional products and services can allow more time and focus on innovation.

## 5 Working together and embracing change

**For all businesses true innovation can require cultural change, and this is no different for the insurance industry. After researching the approach to innovation by insurers, brokers and Airmic members, it is clear that breaking down existing silos and therefore allowing genuine collaboration is the key to effective innovation both within and between insureds and insurers, but also across the wider market.**

17% of Airmic members stated that they considered their insurer(s) fairly or highly innovative (Airmic insurance innovation survey, 2016). Airmic interviewed a selection of these members, all of whom reported that they have a close working partnership with their insurers. Long-term arrangements are also reported as helpful in ensuring there is the understanding of the insured business needed for innovation.

*"We worked directly with our insurers to negotiate higher limits for our supply chain cover beyond the first tier. We have some cover through unlimited tiers, and have been able to negotiate significantly higher limits for some named critical suppliers. This was only possible as we worked with our insurers and their risk engineers to assess critical suppliers as if they were the insured."*

**Business Continuity Manager, Technology**

***The Role of the Broker***

In terms of innovation, the role of the broker is important both in risk consulting and advice, and in pushing insurers to develop relevant wordings. This process can add structure to the risk assessment process by forcing the insurance manager to consider exposures, controls and the impact of loss events on the business.

The broker's close relationship with the insurance manager and their understanding of the organisation is invaluable in facilitating meaningful dialogue between the insured and insurer. However, patience is required and brokers need to commit time and effort in helping develop truly relevant covers, rather than looking to place quickly.

*"Within Marsh, there is a clear link between placement and client advisory services, allowing us to dedicate the appropriate time to gaining a full understanding of the client's risk landscape and subsequently challenging insurers to produce wordings that are as relevant and innovative as possible to their exposures. We look at the client risk (whether currently insurable or not) and that distinction is vital for risk management purposes. We can then look at all the options available to provide real choice. Risk transfer is just part of the puzzle."* **Caroline Woolley, Business Interruption Centre of Excellence Marsh**

Airmic recognises that not every insured will have the ability or time to meet insurers and brokers at the level that can drive innovation, particularly where there is no dedicated insurance or risk manager. Broker-driven facilities will continue to be a suitable route for middle-market insureds looking for preferable wordings and price. However, Airmic will continue to provide a forum for insurers, brokers and Airmic members to discuss risk concerns and possible solutions.

*"As head of insurance within a large insured business, I recognise that my team has the necessary expertise and focus to work with and influence both our brokers and our insurers in developing appropriate covers for our existing and changing risks."*
**Airmic member**

# 6 Conclusion

**The rapidly changing risks of insureds and the opportunity for growth have created a greater appetite than ever within the insurance industry to address the risk exposures of Airmic members. Achieving innovation has never been a higher priority for insurers.**

Airmic interviewed a number of insurers who are taking steps to embrace the opportunity that innovation offers, both in terms of improving existing processes and developing new insurance products and solutions for emerging risks. However, despite this focus, it is clear that insureds and insurers must embrace a number of changes to enable relevant and effective innovation, including the following:

- Insurance and risk managers must engage with their business at the highest level on possible alternative insurance solutions early in the process. They can then assess the organisation's appetite for such solutions and prioritise needs

- Insurance managers must be willing to open up their business, their profit streams and any potential disruptors to underwriters. This may include more extensive risk assessment procedures and bringing finance, marketing and other business functions into the discussion with insurers. In brief, organisations should take a more collaborative or 'enterprise' approach

- Insurers and insureds should move away from the traditional 'silo' approach to risk exposures and insurance classes and create integrated solutions wherever possible to meet client needs in a clear and transparent way

- Insurers need to embrace a 'culture of innovation' where staff are given the time and access to the most appropriate resources to consider opportunities and new ways of working

- Insurance managers should be aware that completely new covers are likely to be relatively expensive compared to traditional products, and may wish to focus on smaller and more tactical improvements to cover as they develop their understanding of the risk.

## Notes

## Notes

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