

How to Beat Your Competition Using Analytics in Insurance



How to Beat Your Competition Using Analytics in Insurance

With Contributions from:

Barry Hawkins, Head of Dynamic Underwriting and Pricing, AXA



Hugh Kenyon, Personal Lines Pricing Director, LV=



James Hillon, Products, Pricing and Propositions Director,
Co-operative Insurance



Disclaimer

Views expressed by our experts represent their sole thoughts on the topic of Insurance analytics. They do not necessarily represent the views of their current organizations and should not be seen as an endorsement of any group, product or strategy.

The information and opinions in this document were prepared by FC Business Intelligence Ltd and its partners. FC Business Intelligence Ltd has no obligation to tell you when opinions or information in this document change. FC Business Intelligence Ltd makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. In no event shall FC Business Intelligence Ltd and its partners be liable for any damages, losses, expenses, loss of data, and loss of opportunity or profit caused by the use of the material or contents of this document.

No part of this document may be distributed, resold, copied or adapted without FC Business Intelligence prior written permission.

© FC Business Intelligence Ltd © 2015
7-9 Fashion Street, London, E1 6PX

www.insurance-eu.com/analytics

Author

Morag Cuddeford Jones

Editor

Emma Sheard
esheard@fc-bi.com

How to beat the competition using analytics in insurance

Much is said of the potential that big data offers organisations in terms of the ability to understand the customer and market to them. However there are few sectors where data and analytics can have such a profound impact on every area of the business, as insurance. From assisting actuaries in determining risk on a more individual level than ever before, to optimising marketing and driving huge cost savings in efficient fraud responses, skilled analysts are in high demand.

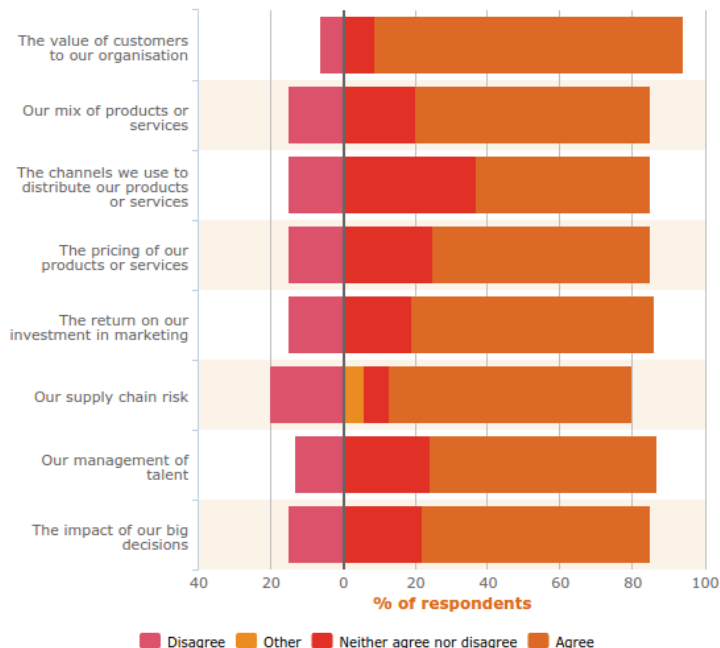
Central to the success of analytics in insurance is using the vast array of information open to these companies in a wise and cost-effective way. Insurers need to determine what data will prove commercially interesting to them as well as being efficient to deploy in a way that will give them the advantage over competitors.

The data itself is unlikely to be highly exclusive. Third party data that can usefully be added to companies' own reserves is available to all. The skill will be in deciding where and how to deploy the best insights. Should companies focus on massaging their risk profiles or looking for efficient channels to serve customers more likely to deliver profits?

Key objectives

Consulting institution PWC surveyed insurers on the value data had for their organisations and 85% agreed that data helped insurers optimise the value of their customers to the organisation while 67% believed it optimised both the supply chain risk and marketing return on investment. Few respondents argued against the usefulness of data however 20% disagreed that data and analytics were important for supply chain, the biggest proportion of dissenters across the categories that PWC put forward to respondents (see figure 1).

Figure 1: What do you use data and analytics to optimise today?



Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

Hugh Kenyon, Personal Lines Pricing Director at LV= states how analytics is impacting his business today: "Insurance has been based around analytics for decades but the key change we're seeing is from the pricing and actuarial into customer management, experience and marketing activities."

"Data is enabling us to build on traditional actuarial techniques so that we are more closely aligning premiums we charge with the risk they present. Assessment of risk is a big focus for us," adds Co-operative Insurance's Products, Pricing and Propositions Director, James Hillon.

However Hillon also notes that analytics plays a big role in boosting the fight against fraud, allowing them the opportunity to move away from traditional sources of information to joining up the different ways consumers engage with the industry. "A customer may get a quote on different comparison sites and amend their details each time to get a more favourable quote. It may not actually be fraud but we need to keep an eye on that."

For Axa's Head of Dynamic Underwriting and Pricing, Barry Hawkins, "pricing is always going to be the lead issue with claims and marketing following." He, like Hillon, emphasises claims from the perspective of using insights to fight against fraud.

Cost efficiencies

Using analytics to better understand customer priorities and organisational exposure to risk is more than just chipping away at the edges to make savings here and there. Insurers have found that by being able to merge insights from third party information with existing first party data, they are able to get a much better view of how great the risks are to their business and how to mitigate them without effectively pricing themselves out of consideration.

"At its simplest level, it's about helping you make smarter decisions and support you in all aspects of your business," Hillon states. For the Co-operative, he states that he is focusing on claims and fraud analytics while also looking at risk pricing and finally operations where the company can look at optimising the use of different channels for customer contact.

In Western Canada for example, personal lines property insurance has struggled to achieve profitability. Weather is having a big impact, as is growing individuality among homeowners. Similar houses such as a row of terraces do not necessarily conform to similar valuations after renovations and digital upgrading is taken into account. External data can help to level the playing field for insurers.

Canadian Underwriter demonstrates how the territory's insurers are using analytics to improve loss ratios and lower loss costs. It reports that in 2013 loss ratio jumped from 58% to 74% in a single year for personal property. But, it also adds that a US study found insurers with by-peril rating plans had loss ratios 7.4% lower than companies with traditional rating systems.

By-peril ratings give customers options. "If they live in an area where they get sewer back-up every year, maybe they can opt out of sewer back-up coverage because it is so expensive. By giving them more information about it, they can start to manage some of that risk themselves and take action to reduce their exposures," reports Greg McCutcheon, President of Opta Information Intelligence, in the feature.

Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

Kenyon agrees with this sentiment: "In personal lines the ability to understand which customers are more likely to claim and then give a more competitive price to those less likely to. Any small margin better than your competitors' is a significant benefit to your profitability as opposed to making any changes to the proposition itself. You want the right price for the right risk."

Improving business flow is an elegant, if less high profile way of making cost efficiencies. "If you can improve the conversion rates of target clients, it saves on marketing. If you target sales more you can make the flow of clients more efficient, save on claims and improve pricing. There are lots of areas you should be able to make savings," Hawkins insists.

Customer experience

Customer experience is a vital piece of the analytics pie. With the prevalence of comparison sites and the low rate of contact between insurer and customer, each touchpoint the insurer has with the customer is a brief moment to create an emotional connection. To be able to connect on an emotional level, the insurer has to show the customer they understand their needs intimately and are able to respond to them intelligently and rapidly.

LV's Kenyon says: "Definitely the whole process should become easier right through from getting a quote to making a claim because there will be a better transfer of data." Axa's Hawkins adds, in a similar vein: "If you can identify more of what their needs are and there are certain 'tells' in buying or policy behaviour, you can give them the feeling that you're paying attention."

To achieve this in a sector where human contact is low unless entering the realm of claims, the customer's digital experience has to be both efficient and personal. Insurers are beginning to realise the value of using analytics to put their systems through a process of almost continual improvement.

RSA Group continuously interrogates its website analytics to pinpoint opportunities to improve customer experience. Where there is an opportunity, the company can design and release a change within days, and sometimes within hours it will start to see the impact the change has made in click through rates (CTRs) or completed online transactions.

In two years the RSA Group's design and development processes have gone from doing six releases a year to over 300 over six months in 2014.

IBM suggests there are six key processes insurers need to cover to make sure they meet the demands of impatient, data-aware consumers:

1. Fast: Use analytics to fast-track legitimate claims
2. Easy: A complete view of the customer, plus insights from analytics, give customers the right answer first time, every time
3. Relevant: Determine policyholders' needs and personalise offers
4. Consistent: Online, mobile, call centres and agents all have the same view of the customer and therefore treat them the same way

Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

5. Value: Able to assess and accurately tailor premiums based on personalised risk profiles
6. Secure: Promote and practise good data management internally and to customersd

Relevance and ease are key for Co-operative Insurance's Hillon where he states that analytics must have a balance: "Customers want the ability to have choice but they don't want endless choice. We've had the idea of tailoring policies to how you want them but there is a tipping point where it becomes bewildering."

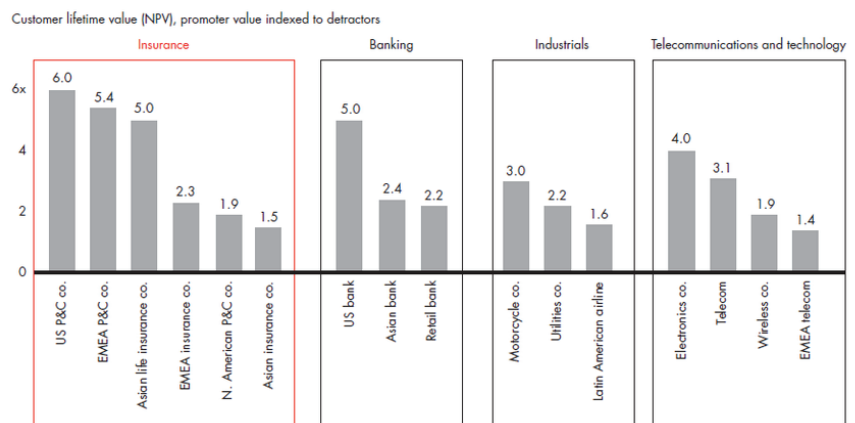
Analytics as a tool for acquisition, retention or both?

As a tool for increasing loyalty, analytics need not necessarily shine a light on individual customers but rather reveal processes that are hindering the company's ability to retain its policyholders. One of the prime discoveries is that preventing customers from switching is down to more than price, particularly in the comparison market era.

A study by management consultants [Bain](#) (Customer loyalty and the Digital SM transformation in P&C and life insurance: Global edition 2014) measured various companies' net promoter scores (NPS), revealing how loyal their customer bases are. The same study shows how Allianz Europe found that customers were forced to call back several times about payments and repeat their details frequently. If milestones in the process were not reached on time, by assigning a case manager and triggering calls and texts, the company's NPS saw a double-digit increase and further, a significant rise in policy renewal rates.

That said, a keen price is one that has the potential to always remain competitive according to Hillon: "If you can find an advantage to be more competitive through data in an environment where price comparison dominates the landscape it's powerful for our business to use information about our members to offer better pricing."

Figure 2: Insurance customers who are promoters of their carrier have a much higher lifetime value than that of detractors



Source: *Bain & Co*

Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

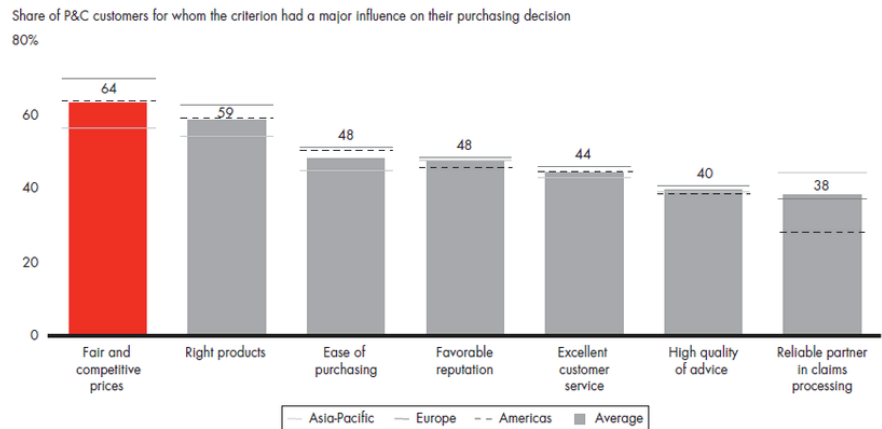
Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

The same report found that P&C customers are mostly attracted by price, so keen premiums based on analytics that combine both market conditions and granular risk analysis are vital. Even still, these customers are still highly likely to switch for a cheaper deal (see below). Some insurers may choose to avoid price-sensitive customers (they either present poor margins to start with or their lack of loyalty means the cost to acquire/serve makes them a loss-making group as a whole) and focus on customers who have other values (i.e. Allstate: Peace of mind). Price sensitive customers can be retained, Bain suggests, if price and service are combined as in the UK's LV= or Apia in Australia.

Figure 3: Price is the strongest purchasing criterion across countries, followed closely by the right product for one's needs



Note: Includes only customers who purchased a first policy with their main P&C insurance provider in the past year
Sources: Bain/Research Now and Bain/SSI global NPS surveys, 2013-2014

Source: *Bain&Co*

Challenges of analytics implementation

The ability to use the vast amount of data that is available to organisations has clear benefits that are easily understood by most insurers. However there remain barriers to adoption. It can be argued that many of these companies are decades if not hundreds of years old and the build up of legacy systems - a common complaint of organisations from many differing sectors - prevents a smooth integration of data from an increasingly diverse (and never-ending) set of sources.

But insurers, out of all commercial operations dealing in data, are often the most adept at moving with the times because data is vital to their business. That said, Hillon believes that one of his biggest challenges is company culture: "If the culture doesn't value analytics capabilities then it's harder to get things done." He also cites being too ambitious and biting off more than the company can chew as a problem: "You're better off doing it in steps and getting some success on the board."

Equally, there is no single way the analysis of this data and the impact it can have on the organisation can be automated. "Technology gets the big PR but it's the same with pricing. You can have the same data presented to two actuaries and get two different prices. People are very important."

Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

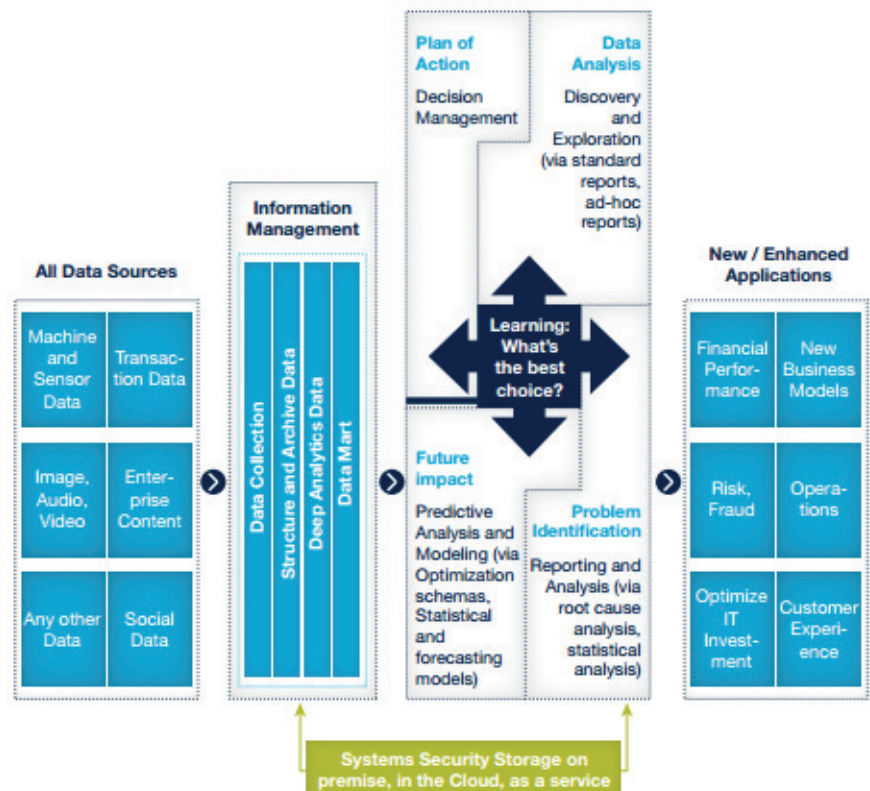
And so secondly, to perform the most effective analytics that touch on very different strategic needs and outcomes across the business requires highly talented data scientists who understand the art and science of data in equal measure. These are not readily found.

Kenyon agrees: "You need to have a strong link between the subject matter expert and the analytical capability. Preferably that's in a single person but where you have the data scientist as a separate function trying to support the business it doesn't work. There's too much of a gap and the conclusions that come out are not relevant to the business need."

Hawkins consolidates both Kenyon and Hillon's opinions: "The major hurdle will turn out to be the resource of the right people and the numbers of them that you need. There is also the traditional conservatism in insurance companies and new ideas need time to bed in. Some will be more open than others."

To be able to manage the complex analytics required of Cap Gemini's theoretical flow of data in life insurance (see below) for example, data scientists not only have to manage volumes of quantitative data but also highly subjective, qualitative data in various forms. They need to not only understand the data that is flowing into the organisation but also strategically the data the organisation needs. These are not often one in the same.

Figure 4: Flow of data in life insurance



Source: Capgemini Financial Services Analysis, 2014

Source: CapGemini

Insurance Analytics EU
 Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

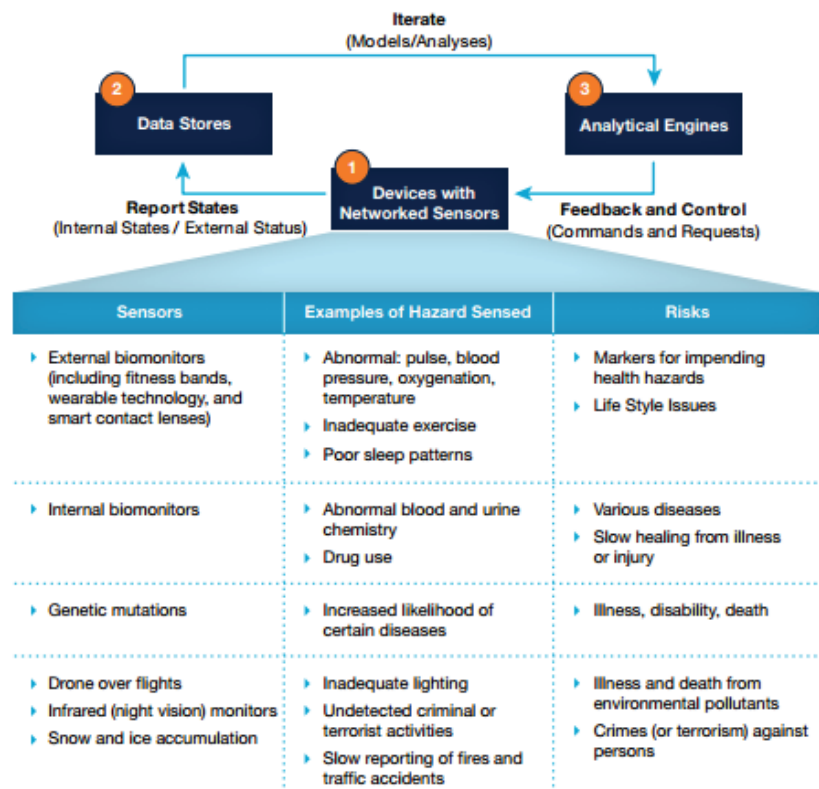
There is no single answer to this conundrum and insurers are approaching the problem in different ways. Hawkins does point out: "It's a bit of an arms race - if you don't do it, someone else will."

Planning for the future

Sources of information that insurers are able to analyse and fold into their business plans are constantly evolving. Not only are there new channels and devices to consider but data is coming into the organisation in ever-changing formats. Take for example, the internet of things (IoT). Wearables is just one of the elements of IoT that can bring in information ranging from pulse and blood pressure to nutrition and living environment.

It has already been ascertained that technology will not provide a single solution to analysing this data. There is neither a single point solution that can deal with these different data sets, nor a system that can cater for each individual organisation's analytics needs. Insurers are going to have to draw heavily on human intelligence to be able to integrate the valuable insights these devices bring into all areas of the company from risk to fraud and marketing. One such example of how IoT data flows might be turned into useful analysis is demonstrated by Cap Gemini's exploration of the impact of IoT on life insurance, below.

Figure 5: Components of the Internet of Things impacting life insurance



Source: CapGemini

Insurance Analytics EU
 Conference & Networking Event
London, October 5-6, 2015

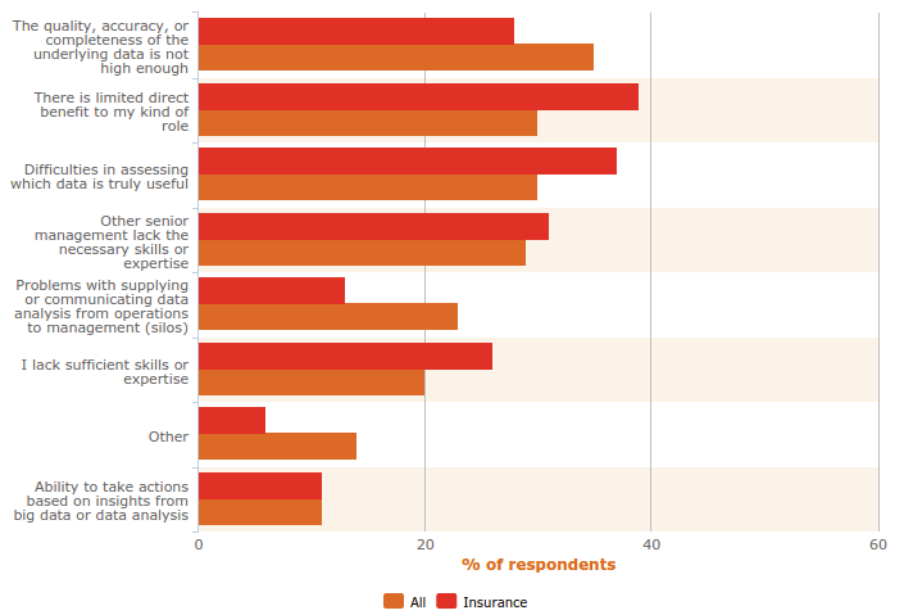
Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

Data and analytics will continue to be vital for insurers, and they enjoy data quality that is higher than average. In the same PWC study mentioned above, fewer respondents in the insurance sector than those surveyed across the whole sample said data quality was not high enough; 28% vs 35%. However, more than a third of respondents stated that they had difficulty assessing data that was truly useful. Perhaps this is due to a similar proportion feeling that the company leadership lack the skills to manage data and slightly fewer (26%) acknowledging that they, themselves are ill-equipped to get the best strategies out of analytics.

Figure 6: What do you see are the main barriers preventing you from making greater use of data and analytics in making big decisions?



Source: PWC

The volumes of information that insurers will be party to or able to access to enhance their offerings will not diminish in the future, it will only increase. "Over the next few years we're going to see data letting customers get a tailored service that is to their and the industry's advantage. But we will go from talking about lots of data to working out how to use it to solve problems in an intelligent way - a mass simplification," Hillon suggests.

Technologies are expected to improve in their ability to handle this data and consolidation is anticipated (such as the recent trend for data technologists such as Oracle and Axiom acquiring data management platform (DMP) companies to enhance their targeting, segmentation and other CRM-related digital marketing solutions).

Staffing and expertise will continue to be the major challenge over the next five years as insurers seek to exploit data that is largely going to be available to all, with strategies that possess real competitive clout.

Kenyon adds: "As an organisation we've come to the conclusion that you have to rethink, you can only be expert in so much so we need to look at partners to help us work with data, understand it and build those services around it."

Insurance Analytics EU
 Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

How to Beat Your Competition Using Analytics in Insurance

Conclusion

Insurers are not waiting for data. The volumes of deeply personal information that are available to them through public social media profiles, governmental open data sources as well as first party information both historical and fresh gives them an abundance of choice.

To gain a competitive advantage, however, data must be selected and then analysed wisely. As a cost reducing measure it is only useful, for example, when the costs saved outweigh the costs required to acquire, manipulate and store this data.

Insurers are beginning to see the value not just of data analysts, but data scientists. Not just semantics, this latter group bring strategic insight to the table, determining where analytics are best deployed, where the competitive advantage is to be found, the most risk mitigated and greatest cost savings made. Understandably, they are a rare and sought-after breed.

Tackling their analytics needs means more than just seeking out new software. Indeed, those executives interviewed for this paper noted that their companies did not lack the technological capacity to manipulate the data that was coming in. For many insurers it is a case of grow your own - often engaging talented individuals with whom they can build a specialist analytics team bespoke to the needs of the company. For others, it is a question of weighing up intimate knowledge of the company brand with a highly advanced and immersed experience of analytics forged in an agency or consultancy environment. In this case, insurers feel it is better to outsource some of their analytics needs to benefit from the latest thinking and then fine-tuning it to individual company use cases.

Executives acknowledge that the sector as a whole has largely woken up to the benefits of analytics, with companies at varying stages of maturity. Where they all agree is that this is never a project that will be completed. The internet of things is just the latest in what is expected to be a long line of innovations, channel shifts and movements in customer behaviour that will necessitate an agile and ongoing analytics-based responsiveness to maintain competitive advantage in a busy and constantly changing insurance market.

Insurance Analytics EU
Conference & Networking Event
London, October 5-6, 2015

Hear strategies to maximise analytics capabilities for underwriting, pricing and improving efficiency

www.insurance-eu.com/analytics

Contact Us:



Emma Sheard

*Head of Projects, Financial Services
FC Business Intelligence
T: +44 (0) 207 422 4349
E: esheard@fc-bi.com*

FC Business Intelligence's Insurance Analytics EU conference and exhibition takes place **October 5-6 October 2015 in London**. The event will draw together thought leaders from Europe's leading insurers. Over the two day event over 25 speakers will explore how analytics can be used by underwriting, pricing and claims teams to gain a competitive advantage, price more accurately and improve operational efficiency. It will have a strong pan-European focus and will attract 150+ senior people from leading insurers and aggregators. With the contributors like the ones listed in this report along with other key spokespersons from international financial institutions, the event will be number one for analytics in insurance in 2015.

To register, visit www.insurance-eu.com/analytics