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# Driving transformation in the insurance sector through trusted data and technology

In an expert forum with Risk & Compliance magazine, FTI Consulting's Peter Kelly and Nicole Austin discuss driving transformation in the insurance sector through trusted data and technology with Bill Conners (ForMotiv) and Ryan McMahon (Cambridge Mobile Telematics).

## **R&C: What do you consider to be the most important new sources of data for insurers? Why does the insurance sector need these data sources now?**

**Austin:** We would define 'new' sources of data as 'non-traditional' data, as opposed to standard economic and demographic data, which insurers and actuaries have been using for a long time. Some of these forms of non-traditional data, from third-party marketing databases, for example, have been available for decades, and it is how we use them that has changed. Data about what we believe – behavioural data – and how we think – psychometric data – are relatively unexplored in the insurance context and so far, are proving to be quite predictive. How we collect this and the speed with which behavioural data can be operationalised make it an exciting new source. Data sources that allow for better pricing of risk and identification of poor risks are needed for two key reasons. One is because people's behaviour, such as purchasing and driving, has been so different during the pandemic that it has made some data sources, such as credit, less powerful. The other is that now the pandemic has pushed more purchases online, it is harder for insurers to really know

their customers. When are they confused? When do they need help? Would a different product be better for them? Are they sincere? It will also allow insurers to tailor and improve an individual customer's experience to suit them and potentially reduce costs by identifying and focusing on customers most likely to buy. This is all important as the insurance sector rebuilds for a post-pandemic world.

**McMahon:** First-party data is rapidly growing in importance to the insurance industry. Insurers that utilise first-party data, or data collected from their customers directly, can better understand the way the data was collected, the strengths, weaknesses and biases of the information and better enable transparency to their customers based on how the data is used. Furthermore, first-party data enables an insurer to build competitive advantage as they can provide improved products and services at better prices than competitors when they apply first-party data effectively. Individual driving risk is an example of first-party data that is growing significantly in usage by insurers to offer competitive products to their customers.

**Conners:** With credit and traditional data becoming less predictive, alternative datasets are becoming more useful for insurance carriers. For example, telematics and spatial data in property and casualty (P&C) and electronic health records (EHR) and pharmacy data in life insurance are becoming the norm. As carriers shift to digital, behavioural data will become increasingly important to properly measure the intent and risk of a prospective policyholder, and to allocate carrier resources accordingly. For example, there is behavioural intent data. As the world increasingly moves from the ‘Blockbuster’ model to the ‘Netflix’ model, understanding user intent has never been more important. Netflix won because it captured an immense amount of behavioural data on its customers and used that data to predict end-user intent and provide dynamic, personalised experiences tailored to the individual user. Insurance is heading in the same direction.

**Kelly:** The number of InsurTech companies is growing quickly; even faster than the overall FinTech growth rate. Many of these companies are providing new types of data, including expanded use data in tracking technologies, such as telematics, internet of things (IoT) and wearable data, and behavioural and sentiment data. These latter types offer insurers the opportunity to use information about individual behaviours and preferences and the resulting impact in predictive models is in some cases dramatic. Almost every type of predictive model, from loss cost to fraud to conversion propensity, is seeing major improvements with the incorporation of one or more of these new data types right now. A challenging phenomenon that the insurance industry has been dealing with over the last 15 years is the weakening of predictive power in predictive models. Most of this weakening has been from the use of non-exposure proxy data like credit. The reasons for this are only partly understood, but the effect is very real on a relative basis, where you have comparative predictive strength vis-à-vis competitors, as well as on an absolute basis, where you have pure predictive lift. As a result, insurers need data sources which can help them differentiate customers so that lower prices can be offered to the best risks. Behavioural and sentiment data is stepping into this gap and in some cases more than making up the difference from the weakening power of the established data sources.

### **R&C: What can insurers do with that data? What is allowed and what is possible?**

**McMahon:** Insurers that use first-party data are better able to match rate to risk, as the information collected can be

directly linked to claims data, with the highest fidelity. Third-party data is subject to several restrictions on how it can be collected, when and where it can be used and by whom. For example, insurers that can collect telematics data are able to identify ongoing changes in a customer’s risk, transparently share that data back with a customer and build incentives that ultimately reduce risk. When asking customers to contribute their own data to help set rates, they must offer enough value to the customer for that individual to opt in; insurers with robust first-party data collection end up with strong consumer propositions that lead to increased customer satisfaction and higher resulting retention.

**Conners:** On the agent and customer experience side, carriers can provide dynamic experiences to drive optimal outcomes. On the risk and fraud side, carriers can mitigate risk with additional data checks and step-up underwriting for a proposed insured.

**Kelly:** Technically, insurers can do whatever they want with the data. Most insurers that acquire the data are testing every possible use case. The challenge comes with operationalising the new data because some of it has no historical basis and must be collected, for example digital behavioural data collected during applications, and some of the use cases in some countries would require regulatory approval. In these cases, insurers are reluctant to disclose the use of the new data until they have a higher level of comfort with the performance, such as pricing applications based on predictive models using sentiment.

### **R&C: To what extent do data-related opportunities differ by country and line of insurance?**

**Austin:** The type of data collected and how you are allowed to use that data differs by country and sometimes within a country, for example from state to state in the US. In the US, companies that employ data-driven marketing have been collecting and processing a tremendous amount of data for years, which is available for a fee. Data may not be available to the same extent in some countries in Europe. This will limit what data is available to feed into predictive models. Privacy and data use laws also differ across jurisdictions – there is the General Data Protection Regulation (GDPR) in Europe and Fair Credit Reporting and the Health Insurance Portability and Accountability Act in the US, which constrain how personally identifiable information can be used and protected. Insurers must identify that what they are doing is allowable in the region that they are in. Consent to the use of data is key – it is important that the use to which data is being put is the use for which consent was given.

**McMahon:** This is where investing in strong capabilities around first-party data collection is significant as the insurer is not reliant on broader infrastructure to be able to assess risk. If an insurer was to rely on motor vehicle reports as its sole methodology to assess driver risk, it would have to be confident in the underlying data that demonstrates a safe versus risky driver. Of course, enforcement and adjudication of traffic violations is not a universal maxim that can be applied to address risk around the world; as a result, the insurer is left with data that does not accurately depict risk. Telematics is an excellent alternative to this problem as insurers can use the data they collect directly to assess risk across all enrolled drivers. This creates a significant competitive advantage.

**Connors:** There is deviation between life and auto insurance. Life insurance is heavily regulated and a more strenuous and lengthy process for a prospect given the face value of policies. And there are differences for term life policies versus whole-of-life. The challenge life carriers face is the next generation of policyholders who expect things instantaneously and do not want to wait to be covered, so there is a race to provide instant underwriting with no medical exam. Look at all the money being poured into InsurTechs. Carriers need to make instant decisions with less data and a changed consumer expectation. In auto insurance it is far more transactional but there is more misrepresentation. Additional datasets can be used to increase conversion rates and keep policyholders longer given how price sensitive that segment of insurance is.

**Kelly:** Volume and standardisation are the key to deployment for many of these new data sources. Following the path laid down by telematics applications, personal non-life lines of insurance in lesser regulated countries are the settings where the data is delivering the most value across the most use cases. The life industry is starting to use these new data sources, although a small number have significant experience with IoT data. Commercial lines of insurance involving assets are also using remote sensing data, again leveraging the positive experience seen for decades in fleet telematics.

### **R&C: What technology requirements do insurers have to meet to realise the value of this data?**

**McMahon:** Globally, insurers have almost universally sought partners to help them build and implement capabilities to assess driving risk data. The most important step an insurer needs to take is to find a partner that shares the same values as them that they can collaborate and innovate with to help the company achieve its goals.

**Connors:** Carriers need to have digital-forward processes for their agents and customers. If they have a digital interface, they can collect and analyse this data.

**Kelly:** Realising the value of data is entirely a function of the nature of the data. Some of the new data is available as a retrospective or point-of-quote dataset and in these cases, the insurers can ingest the data in the same way they do with existing data from third-party data enrichment providers. In this case, it is merely a matter of prioritisation and capacity in the insurer's data enrichment team. In other cases, the data must be captured and accumulated, which requires some infrastructure for the data capture as well as the collection and evaluation of the new data. These technology requirements are generally not extensive. The challenging issue is that the investment must be made before the value is confirmed through retrospective analysis.

### **R&C: In what ways should insurers be worried about the ethics of using some of this data?**

**Austin:** If insurers responsibly collect and use data, there should be no cause for concern. What this means is that insurers must make sure that they know how data has been collected and have the right to use this data, they understand the data, they understand the models that use it and how the data is used and transformed. In short, if companies ensure robust governance structures and audit trails, either inbuilt in platforms or external, around data usage then ethics should not be a concern. However, insurers must avoid the tendency to rush toward operationalisation for immediate commercial advantage and in the process skip key steps of data source and use review and proper governance.

**McMahon:** Ethics in data usage is a critical topic for the global insurance industry. First-party data like telematics requires a higher degree of engagement with a customer than most sources of data that an insurer has historically used, which, in turn, requires a higher degree of trust. Insurers that are seeking long term, sustained competitive advantage are best positioned to provide products and services to customers that are transparent and offer outsized value versus competitors. The companies that respect consumers and their data are those that will win the long game.

**Connors:** With any data source and when using machine learning or artificial intelligence, it is imperative carriers are taking an approach that maximises explainability and minimises bias.

**Kelly:** A longstanding debate which reached its peak when credit was first used, this issue is coming the forefront again. For the present time, if the data is publicly available, or if consent was explicitly given, or if the data was captured through direct observation, most insurers feel that this issue is a settled matter. Statistical validity has been the proof positive for ethical use and the argument that if it allows some consumers to have a lower price because they have a trait associated with lower losses, it is or will ultimately be allowed. To not do so is to enforce a cross-customer subsidy which is in place if the data is not used.

For more information on FTI Consulting's data solutions for the insurance sector, please contact Peter or Nicole on the details below.

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