

A.I, Blockchain and Analytics Trends in the Insurance Sector

According to a recent global survey Leadership in the Age of AI, most organizations began deploying Artificial Intelligence technology to automate or improve routine or inefficient processes. Two thirds of those surveyed are using A.I. more for business process automation, which is often seen as a good place to start because it can deliver quick improvements. AI is very much in its infancy but on the positive side 90 per cent of C-level executives have reported tangible benefits accruing from the use of A.I. applications in their businesses.



On the flip side, respondents also noted that their organization's data is not ready from a support standpoint, which means they are finding it difficult to deploy the AI technologies they want. If we are to take these findings to their logical conclusion it means that we can expect to see more investment in data management strategies as enterprises aggressively try to seek competitive advantage through A.I. technologies.

According to the survey, almost half of respondents reported that their company's A.I. deployment is quickly outpacing the accuracy and productivity of comparable human endeavour. This is a worry, to us all of course. Who can be blind to A.I.'s potential ethical and human dilemmas? 69 per cent of

C-level executives reported that their employees are concerned that AI technologies will replace them.

It's not all doom and gloom though. There is a strong chance that organizations will end up using A.I. to improve human skills therefore making employees better at their work as well as more fulfilled. To get to this point, however, there will need to be focus on training to help employees develop adaptable skills for the future, which is where a stronger focus on IT Leadership can play an important role.

With A.I. being integrated into more operations, the components of leadership should be magnified across several tiers, including overall. As the survey recognises, 80 per cent of C-level executives believe their future business strategy will accommodate opportunities that can be made available leveraging A.I. technology.

Just as important, four fifths of C-level executives are confident their company's executive team will be able to adapt their leadership skills as AI technologies are adopted across the enterprise. In fact 70 per cent of C-level executives strongly agreed that A.I. will benefit their people at all levels of the business.

According to one report in a Japanese daily, the insurance firm has introduced an A.I. system based on IBM Japan Ltd.'s Watson, which according to IBM is a "cognitive technology that can think like a human," and "can analyze and interpret all of your data, including unstructured text, images, audio and video."

Less positively, the data reveals concerns with A.I. among business leaders in that it might lead to a lack of transparency in their company due to technology's new-found ability to run autonomously. Consequently just over 50 per cent of CEOs are worried that leadership will have less in-built transparency within their business due to A.I. and process automation.

Some organizations are already experiencing the benefits of AI as it becomes mainstream in business, and there is a fear those who are not already experimenting with AI will be left behind (given a long enough time horizon, this will likely be the case).

Fukoku Mutual Life Insurance Co., for example hit the headlines last year when it announced plans to slash nearly 30 per cent off its payment assessment department's human staff after introducing an A.I. system in 2017 to improve operating efficiency.

In addition to determining payment amounts, the system will also be able to check customers' cases against their insurance contracts to find any special coverage clauses -- a measure expected to prevent payment oversights.

Fukoku Mutual has already begun staff reductions in preparation for the system's installation. In total, 34 people were expected to be made redundant, from a pool of 47 workers. Clearly the future is now but in order to remain competitive, businesses investing in A.I. should also invest in their employees. As the technology increases in scale and helps to deliver further transformation, companies that embrace training and re-skilling current employees should be able to realize tangible benefits.

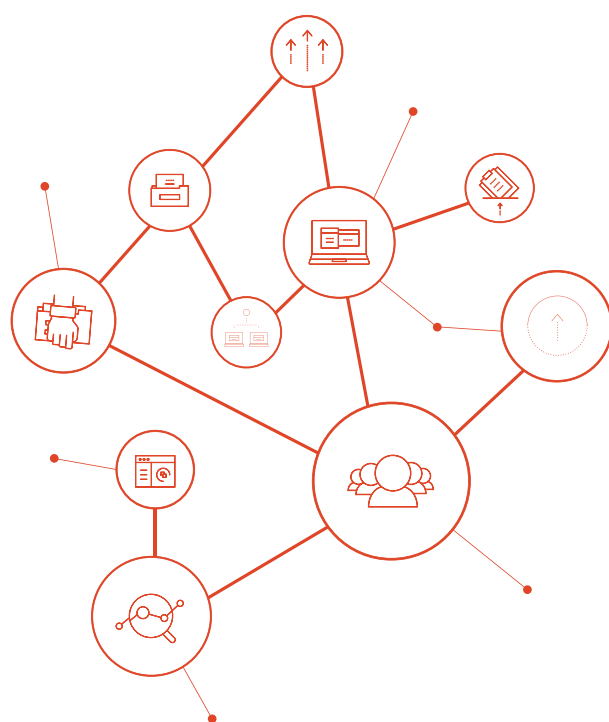
Business leaders in the insurance landscape, for example, can create opportunities while heading off potential risks before they cause major problems, however, A.I. will bring continuous change so training can't be a one-off initiative. As with all major change, successful business will be those adopting a culture that is in tune with the skills required for today's knowledge economy. Business and IT leaders will also need to mature their own

skills to build a deeper understanding of today's technologies such as A.I, data analytics and even Blockchain that will drive their business forward in the years ahead.

The world of (re)insurance traces its roots back 300 years to the Lloyd's coffee shop and huge risk industry that was built around it. More recently, underwriters have been joined by other business units as insurance has incorporated the latest risk management and modelling techniques into their platforms. That trend has accelerated in recent years as it has become increasingly clear that technology, IT leadership and project management skills need to become an essential weapon in a modern insurance company's armoury.

That's why Fifth Step made a point of attending last year's Monte Carlo Rendezvous to see if there was anything we could take away from the event that would be of interest to Fifth Step's CIO and IT Leader clients, and which they should be aware of.

What we learnt was that the potential for technology to disrupt the traditional insurance business model was a hot topic yet again for reinsurance leaders. Blockchain technology, for example, took a step forward in the consciousness of the insurance market with the announcement of the (re)insurance B3i initiative that was unveiled at the event.



The resilience aspect of Blockchain is very interesting because transactional data is now backed up potentially hundreds or even thousands of times at different locations not only in London but Singapore, India, the US or where other people are participating in the blockchain in that market.

B3i is an initiative of 15 members of the insurance industry, launched in October 2016 to explore the potential use of the distributed ledger technology and develop common standards for the industry. Members are Achmea, Aegon, Ageas, Allianz, Generali, Hannover Re, Liberty Mutual, Munich Re, RGA, SCOR, Sampo Japan Nipponkoa Insurance, Swiss Re, Tokio Marine Holdings, XL Catlin and Zurich Insurance Group.

According to a press release on the Allianz website: “The prototype, which has been developed over the past 3 months, has the potential to radically simplify how the insurance industry does business. With this step, B3i members and the greater market are able to see how it all comes together. The system covers the major elements of the Property Cat XL reinsurance contract life cycle (i.e. smart contract setup, premium settlement and claim settlement).”

There is still some uncertainty in the market as to the difference between a smart contract and a normal contract. What is the difference between a policy or a smart policy? Flight cancellation is the example many people use. The definition of a smart policy or smart contract is where clear terms can be defined and then monitored from third party sources and there are other examples.

Take the commonly-used flight insurance example. You as a traveller take out travel insurance. When you take it out the policy says we will pay you if your flight is delayed by more than 60 minutes - or whatever the term is that you accepted. You pay your premium and your flight is delayed by two hours. What do you do? You document the fact, take a photo of the flight board with two hours delay on it, contact your insurance company by phone or internet and fill out their claim form. Sometime later the insurer phones you up to clarify some details or they will come back and just pay. But there is a period of time lag and typically, in my experience, it is not less than a month - even when things run smoothly.

With a smart contract, however, the idea is that the claims event is rendered indisputable by a trusted third party. If you are the insurance company, I am the claimant, the airline has publicly available services reporting that flight has been delayed,



which alerts the insurance company that does a quick search on which travellers are inconvenienced and pay them immediately. The idea being there that the payments are triggered by the undeniable data from external sources.

Cyber-risk also topped a list of concerns for reinsurers in a new report from professional-services firm PwC. The report, titled Uncharted Waters: tackling reinsurers' riskiest exposures, is based on a reinsurance cut of the Insurance Banana Skins Survey 2017 from PwC and the Centre for Financial Services Innovation.

According to PwC:

“The analysis highlights the most serious concerns on the industry’s risk register. Cyber is closely followed by concern about the industry’s ability to weather change and pressure on investment performance. Other prominent fears include technological disruption. Regulation and a challenging market environment have long dominated the top of the rankings and, although these still play on reinsurers’ minds, the most pressing concerns in 2017 are rooted in the shock and uncertainty of the ‘new’.

“Cyber-risk concerns reflects both the anxieties of underwriting a risk that’s constantly changing alongside the rising threat to reinsurers themselves. Far from being simply a technology risk, cyber is now a significant reputational and systemic concern for insurers, reinsurers and their clients. The report shows many businesses across the world are aware of the risk but remain unwilling to buy cyber cover due to restrictive coverage and limits.”

XL Catlin, meanwhile, said that reinsurance growth remains challenging, so innovation will remain a critical topic. The company reported that the industry at times can seem to be one step behind when it comes to technology and adopting

new methods. According to XL Catlin: “InsureTech is making us all sit up and pay attention. At XL Catlin, we have invested heavily in the future. For example, we have set up XL Innovate, an XL Group-sponsored venture-capital initiative, which invests in early stage industry innovators.”

One of the topics being debated in 2017 was flexible motor insurance with specific reference to ‘in-cockpit’ or vehicle devices that are smart enough to know who is driving. One usage would be to imagine the Uber driver or the Deliveroo driver that uses their car or scooter for 20% leisure but in the evenings they require additional business cover. The policyholder says I am now an Uber driver please activate my Uber policy and automatically suspends their normal policy. Or the smart policy supplements the normal policy so that if our policyholder does have an accident while they are driving as an Uber driver – and say they have a passenger on board - then they have the right level of cover.

In this exciting new environment it is clear that CIOs working at, say, an insurance company will need advice on the potential benefits of blockchain(s), data analytics and A.I. to see how these might support the role out of new products and ultimately grow the business. I believe that Blockchain, for example, benefits fit into three towers: IT leadership, change management and business resiliency.

IT Systems

CIOs and IT leaders need to know what the Blockchain is for and lead on development working in partnership with the business. The CIO will need to strategize and establish how they are going to make use of it. Is it something that is going to make a big change to how their organisation works or is just a change to their method of storing data? If it is the latter then chances are that it won’t be a big IT leadership change, it will be more about the products.

I believe, however, that it will offer more than data storage and it will involve the CEO's support and interest because Blockchain evolution is going to be product led. What new products can we create? Can we develop smart contracts, which mean that 80% of our claims can be validated by a trusted third party? OK, we have to validate these third parties on an occasional basis but can we use their feed to validate that the claim has been delayed, for example? So the claims processing goes from 100% human interaction to maybe 80% human interaction. Blockchain is going to be a CEO education piece requiring strong CIO support and leadership.

IT and Business Resilience

From the resilience side we are going to see major step changes to the business environment. From a CIO perspective you have got to relook at your resilience. It is more likely that resilience is going to be strengthened because Blockchain's distributed ledger capability means that at least part of your data is backed up in numerous locations. The other aspect to that, however, is that the encryption being used is appropriately strong. Now that is something that is not typically an implementation decision, it is more of a security and resiliency decision, but with a block chain implementation it is all part of what is being deployed.

Many insurers, for example, lack the expertise or resources to understand the sheer volume and complexity of data that is being churned out by

multiple data providers. There is now a gap between the petabytes of data out there and insurance companies' ability to process, and gain insights from that information. Senior IT Leaders can, however, play a vital role in closing that knowledge gap and increase the value add that they provide to the business.

Change Management

The change management tower straddles Blockchain development because of the need for implementation, which is going to be change to your business with new products being created. It may also mean there is change to the shaping of the claims team, it may need organisational assistance in that respect and maybe change to the IT team. Potentially it may require a Project Management Office or it may need light touch project management assistance.

Bespoke Services

Fifth Step operates on a consultancy basis to add value to clients by delivering bespoke services to agreed plans, timetables and budgets. If you would like Fifth Step to help you get a better understanding of A.I., Blockchain and Analytics Trends in the Insurance Sector, please contact us - Info@fifthstep.com

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About Fifth Step

Fifth Step is a global provider of Cyber Security solutions, ranging from online self-assessment tools, to planning and managing ISO 27001 certification. We deliver service based solutions on a flexible bases, being cost effective and proportionate to our clients organisation and develop in-line with their requirements.