DIGITAL SOLUTIONS FOR THE INSURANCE SECTOR

White Paper Series 2018





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Executive Summary

The insurance sector is facing a host of changes and challenges, not least of which is the requirement to comply with ever-extended financial regulations.

> Amidst all this, the industry is under increasing pressure to deliver digital solutions for their increasingly expectant, online-savvy clients, as online transactions and communications become ubiquitous.

> The number and complexity of these regulations, to which the Insurance sector has to respond is increasing not decreasing, something which directly impacts digital strategies for any online enterprise, and especially ones as highly-regulated as the insurance sector.

With new regulators and increasing globalisation this pattern is repeating the world over, the specific regulations and priorities will be different in each region, but the complexity and rate of change is increasing everywhere. This situation is unlikely to change and, if it were too, it would not happen swiftly. Another industry change is that some regions are looking to change their approach from rules-based regulation to risk based. Essentially, this will mean a major change to the way insurance companies approach their regulatory management. It will, in the first instance, require a significant shift of mind set, rather than just a change in technology. A searching question that arises from this is...

Could the lessons from technology and digital transformation those in the insurance sector meet these changes?

Well, we can start at the explanatory beginning, so to say...

Digital transformation is using digital means to enable new types of innovation and creativity, rather than simply enhancing and supporting traditional methods. Business focus, and business solutions, are at the epicentre of digital transformation.

This is not just about providing new technology solutions, rather, it is underpinned by the need to

change the underlying culture and focus of the business, to innovate the way the business is conducted, as well as the technology enabling that business.

Insurers have been spending a lot of money building and enhancing systems for years and are, in many cases, still struggling to comply sufficiently with regulations in a cost effective and timely manner. That is why digital solutions are both necessary and critical.

Competitive Focus

So, what are the issues, what are the areas we need to identify in terms of providing a digital solution?

A closer look at a few of the regulatory challenges may give us some insight into the digital challenges faced:

Focus on Consumer and Consumers Data

Insurers sell to businesses and end consumers depending on the type of insurance required. End consumers are not necessarily informed and thus require greater protection, thus introducing the need for a secure IT ecosystem, with overarching digital solutions.

Regulators have recognised this and have turned their attention to how the insurance sector conducts its business as well as the financial side of regulation.

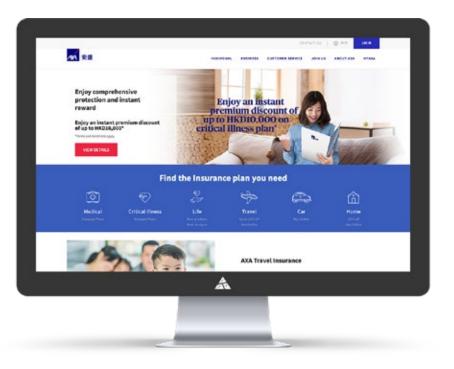
Insurers are expected to treat consumers fairly and be able to report to the regulators on how they are protecting their consumers. Are they selling the right products? Have they asked the right questions to determine that and allow the consumer to report anything relevant to the risk? Once consumers have bought the product the insurers have to continue to treat them fairly, The insurer must protect themselves from financial risk to ensure they can pay out to the consumers when required and must also ensure they pay out promptly for valid claims.

Once they've got all that consumer data they need to ensure they collect, use and store that data fairly. Fairly is such an inadequate word for the huge set of regulations governing that data.

The regulations include the General Data Protection

Regulation¹, GDPR in Europe, a patchwork of federal and state data protection laws in the US and a new regime in China for 2018 that seems to be even more far-reaching than GDPR.

1 https://eugdpr.org/



AXA Asia Jira & Confluence Systems Upgrade

To comply with the consumer protection, insurance companies need to:

- Change the cultural mind set of the entire business to put the consumer central to their business
- Ensure culture, business practices and operational processes all reflect consumer protection at its heart
- Ensure systems and data support the culture, business practices and operational processes
- Ensure they can report on above and demonstrate

in the reporting

• Ensure systems and data support data protection regulations

To achieve this, insurers need to make a change to traditional mind sets, specifically in terms of doing business as well as ensuring they have all the information and systems available to conduct the business fairly.

Solvency

Regulators require insurance companies to maintain specified levels of capital in order to continue to conduct business. They need to have enough capital to cope with the worst losses over a year. Again, these issues are not only insurance related, they are linked to digital solutions across industry IT ecosystems.

Solvency $\mathrm{II}^2\,$ came into effect in Europe in 2016. China

Risk Orientated Solvency System (C-ROSS³) was implemented in 2016. The US has Risk Based Capital (RBC) requirements.

The detailed requirements differ region to region but most, if not all, countries or regimes have similar regulations. Despite these regulations being in place for over a year already the regulations are still giving insurers challenges.

2 https://en.wikipedia.org/wiki/Solvency_II_Directive_2009 3 https://www.casact.org/education/reinsure/2015/ presentations/C-15.pdf Insurance companies derive income from both insurance premiums and investment of capital, therefore the more capital they have to hold for solvency purposes the less capital they can invest.

So, the question arises... how do they balance ensuring they have enough capital to cope with the worse losses, and still be able to derive sufficient income from investing their capital?

The banking sector has already experienced this

with Basel II⁴. Banks have typically addressing this

by enhancing their risk calculations and reporting by improving the frequency and accuracy of their risk calculations so that their capital requirements can be reduced thus allowing them to invest money previously held due to insufficient information about the risk profile of their investments.

In order to be able to do this in a way that makes meaningful and significant improvement in the calculations and thus the amount of capital to be held insurers will need to change and improve internal processes.

Additionally, IT systems will require extensive and continuous change and investment. This will require different ways of working and will cause challenges in the internal organisation and staffing of the insurance companies.

To comply with Solvency regulations insurers will have to change regulatory focus from rules based to risk based (depending on the regulatory regime), that means a huge mind set change to identify the risks and determine risk management and be able to explain and justify the decisions rather than simply following a set of rules.

Adapting and enhancing current systems is unlikely to be adequate, particularly if accompanied by a shift from monthly to daily reporting for example. Processes and systems will need to be redesigned with a new focus. Staff at all levels will become more responsible for identifying and calculating risk. Barriers to timely reporting will have to be overcome.

IFRS 17 Importance, Significance, Solutions...

The International Financial Reporting Standard⁵ was issued in May 2017 to be effective 2021. It requires a change to calculation of insurance contract liabilities. Contract liabilities will be calculated as the present value of future insurance cash flows with a provision for risk.

The discount rate will reflect current interest rates. Even in simplest terms calculating the present value will require both an understanding of the calculation

5 https://en.wikipedia.org/wiki/IFRS_17

⁴ https://whatis.techtarget.com/definition/Basel-II

and risk and ability to accurately obtain that value with sufficient governance in the process to ensure accuracy and timeliness as well an ability to retrospectively justify that calculation.

While this doesn't require the levels of culture change the other regulations we've look at will require this will require expert knowledge and from a processing point of view will need more data including from external sources, in a timely manner as well as quicker processing of more complex data and calculations.

And so, once again, digital solutions become key.

This will, for the insurance industry, mean necessary and extensive IT changes, and expert IT knowledge, that may be in short supply in the sector.

The Regulators have expressed their own concerns about Insurers ability to respond to all the changes

In March 2017 the Hong Kong Financial Services Department Council (FDSC) issued a report 'Turning Crisis into Opportunities: Hong Kong as an Insurance



Prudential ASIA Jira Custom Development

Hub with Development Focuses on Reinsurance, Marine and Captive'.

One of the points this report addressed was the need to nurture and foster talent within the industry in order to secure future growth.

Just looking at a small selection of the current regulations as well as those on the horizon we can see that there is a need for the Insurance sector to know a lot more about their business sand customers and to know and act on that much more quickly. The business focus also needs to change to truly put the customer at the heart of their business so that they understand the transactions better and so that they are treated fairly.

To address this Insurance companies are going to need staff at all levels to educate themselves and challenge the status quo constructively. Staff will need to not only cope with the resulting organisational, procedural and IT changes but to initiate them and to deal with change.

Digital Business Solutions Summary

How does this fit with Digital Transformation?

Can existing staff and organisational processes cope with this?

Is there a need for the traditional risk averse ways of working to change?

Do insurers need to challenge staff to think differently?

Does the insurance industry need to operate differently, digitally?

Organisational change, staff learning and knowledge and changes to IT systems are all required to deal with the regulations on the horizon.

At Appnovation, we can see a number of new staff capabilities that will be required before insurance providers even get to the stage of building digital solutions. For us, this new set of capabilities and mind set is an important part of any digital transformation solution.

Required Capabilities Include:

- Professional Culture Change
- Agile Working Environment and Ecosystem
- Organizational/Operational Change
- Innovative Technology Change

To expound on these....

Professional Culture Change

Putting your client at the heart of the business, ensuring every process identifies customer needs, ensuring that they have the right information and treats the customer fairly.

Moving from identifying customer need to identifying customer wants. Ensure the customer is not just satisfied but delighted with the business relationship.

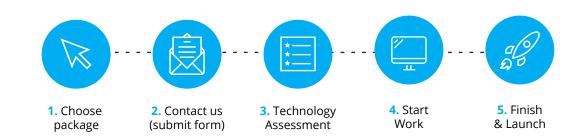
Agile Working Environment and Ecosystem

Move to agile working to include all staff more in the changes and enable change to happen faster.

This isn't just an IT centric way of working; all staff can adopt Agile ways of working such as Sprints & Scrums to put business product owners in the centre of the initiatives and make use of everybody's expertise and talents to design innovative, elegant solutions with fast deliveries.

Embrace processes such as sprint retrospectives, to build a learning and improvement culture so that, over time, initiatives improve and deliver more, and delivery results quickly.

https://www.appnovation.com/corporate-agility



Organizational and Operational Change

A change within the hierarchy of decision making, and a challenging of the status quo, always to be done constructively. Allow staff to question whether clients are getting and understanding the information they need to make decisions.

This can no longer be a 'one size fits all customers' approach.

Innovative Technology Change

- Continuous fast technical change.
- Customer focussed technical change.
- Make use of principles such as Atomic design to build and reuse components.
- Explore the use of AI and machine learning to identify risk.
- Ensure data management is better than fit for purpose and information required for regulatory reporting is also used by the business to inform their decision making.

Conclusion

Deliver often and embrace change.

With so many digital challenges facing the insurance industry, the simple conclusion, though couched in some complex solutions, is the need for change.

From the underlying IT set-up, to potential integrations, workflow enhancements to the delivery of a superior, seamless and solid user experience, digital solutions must run through the digital ecosystem like DNA.

Delivering digital experiences of a high standard is no longer a luxury item, it is a necessity. Customers demand it, insurance industry workers require it, and, as ever, the ever-evolving technical landscape ensures that such experiences are essential for growth and consumer satisfaction.

Though I am not inclined to distil this issue into a few points, those below will at least begin to draw on the digital solutions points, and pointers, that have been discussed, to hopefully invoke further discourse, and ultimately elevate the level of digital experiences within the insurance sector.

As new, more stringent regulations are introduced, business globalization continues unabated, and regional IT landscapes continue to evolve rapidly, the time for digital solutions in the insurance industry is now.

Insurance is all about covering risk, and Appnovation is all about providing a digital solutions policy that is underwritten by technology industry experts, driven by innovation, and proven to increase productivity and customer experience.

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