THE DIGITAL INSURER
The forum for digital insurance in Asia

Digital Underwriting & Fulfilment

Your guide to the latest trends in Digital Underwriting & Fulfilment in Asia

Interviews with industry experts

Exploration of key trends in Asia

The latest themes explained

Produced in collaboration with:

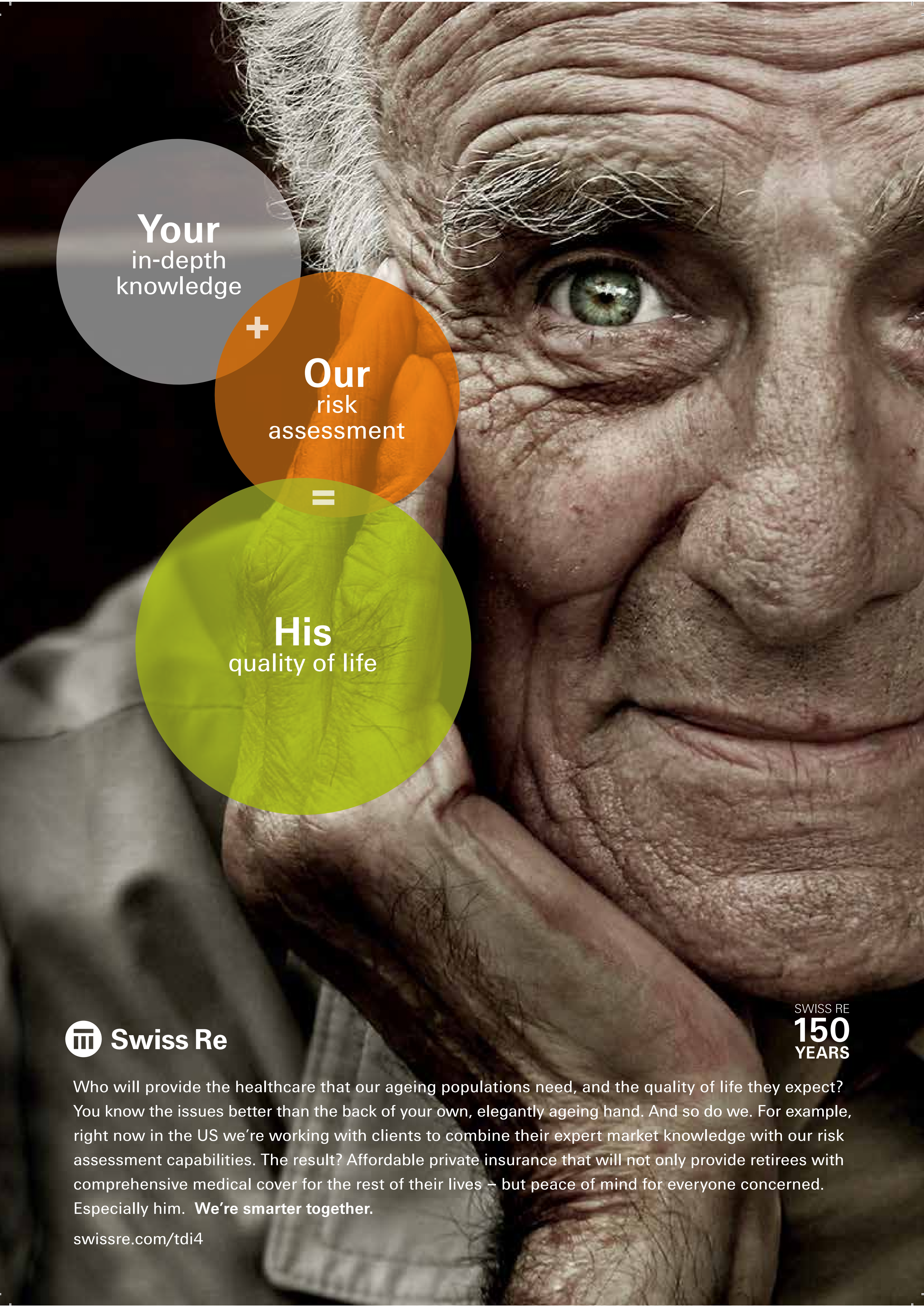
Swiss Re

Digital Underwriting Basics

Predictive Underwriting In Practice

Digital Fulfilment Trends

Predictive Underwriting In Theory



Your
in-depth
knowledge
+
Our
risk
assessment
=
His
quality of life
Swiss Re
SWISS RE
150
YEARS
Who will provide the healthcare that our ageing populations need, and the quality of life they expect? You know the issues better than the back of your own, elegantly ageing hand. And so do we. For example, right now in the US we're working with clients to combine their expert market knowledge with our risk assessment capabilities. The result? Affordable private insurance that will not only provide retirees with comprehensive medical cover for the rest of their lives – but peace of mind for everyone concerned. Especially him. We're smarter together.
swissre.com/tdi4

Introduction

Hugh Terry

Welcome to The Digital Insurer's Thought Leadership Report focusing on digital underwriting and fulfilment in Asia Pacific. We are delighted to have written the report in collaboration with Swiss Re, The Digital Insurer's first official sponsor. By leveraging Swiss Re's deep knowledge and expertise in this area together with The Digital Insurer's proprietary insights and material, we have compiled a comprehensive report consisting of a series of articles edited by The Digital Insurer which cover the key themes in digital underwriting and fulfilment.

The disruptive nature of digital technologies and their potential to impact the entire insurance value chain is unquestionable and as a result, insurers are starting to place digital firmly on their agenda. We believe that one of the key areas for opportunity and impact is within underwriting and fulfilment. It's often an area that gets downplayed or slightly lost among more 'hot topic' areas such as customer centricity or mobility when devising digital strategies. However, the underwriting function forms the core of an insurance business – getting digital right in this area is often a challenge but the benefits to all stakeholders are significant.

The articles in this report are a collection of views from some of Asia and Europe's top experts in the domain who have written about their experiences and views on topics such as Digital and Predictive Underwriting and Digital Distribution and Fulfilment. They are designed to inform readers on the latest trends and opinions but also offer practical implementation tips, examples and guidance.

Given the digital nature of the subject matter, we also decided to make the format of the report digitally enticing with a flipping books format option as well as the usual PDF options – we hope you like this!

We look forward to your feedback and suggestions for topics and improvements in the future.

Hugh Terry

The Digital Insurer

About The Digital Insurer

The Digital Insurer is a forum for professionals interested in the impact of digital thinking and trends on insurance business models and processes.

With over 4,000 subscribers and more than 1,500 LinkedIn group members it is the leading forum on digital insurance in the Asia Pacific region.

Visit www.the-digital-insurer.com for more information

David Cook

Swiss Re is pleased to be associated with The Digital Insurer's Thought Leadership Report on digital underwriting and fulfilment in Asia Pacific.

Changing consumer preferences and buying behaviour as well as the customer experiences received in other industries all contribute to the increased challenge faced by insurers to deliver innovation in the area of underwriting and fulfilment. In order to remain relevant and to respond to customer expectations, insurers are fast realising the need to adapt their business models and embrace new technology to successfully distribute their products and services in a customer centric way. This publication directly responds to the key challenges and areas of opportunity that many insurers are currently facing when attempting to successfully execute a digital strategy.

Articles

Articles

Digital Underwriting Basics

Underwriting rules engines and workflow systems

Introduction

Across many lines of insurance, risk assessment has traditionally been seen as the sole preserve of trained underwriters. Today, advances in technology mean that large numbers of applications for insurance can be accepted automatically allowing the underwriters to specialise on the more difficult, complex cases.

This article examines two key technologies, underwriting rules engines and workflow systems, that can deliver a more effective and efficient new business process to insurance companies, their distributors and their end consumers.

Underwriting rules engines

What is an underwriting rules engine?

Life insurance and annuity carriers face intensified pressures to reduce costs and improve efficiencies across the full policy lifecycle. Most already have 'jet issue' engines which validate and accept completely clean applications which do not require any medical evidence.

Underwriting rules engines are more sophisticated as they can assess medical and other disclosures made by some customers. They can potentially ask additional reflexive questions to obtain more detailed data from the applicant, allowing a rapid and consistent underwriting decision to be made.

As well as accepting standard risks, underwriting rules engines can apply loadings and exclusions, allowing higher numbers of applicants to be processed without being seen by a human underwriter. Alternatively they can request evidence from third parties or refer to an underwriter.

What are the benefits of a rule based engine?

Perhaps the biggest advantage of underwriting rules engines is the impact in reducing the sales cycle. Automated underwriting gives agents the flexibility to close a sale in a single meeting and dramatically improve the client experience. An agent could visit a client, capture application information on his digital device and deliver an underwriting decision in a matter of minutes. Automatically underwriting the application and accepting a client at point-of-sale greatly increases the agent's chances of completing the sale.

By streamlining and automating the underwriting process, underwriting rules engines also reduce the time it takes to underwrite an application and therefore lower insurers' per policy costs.

In addition, one of the positive spin-off benefits from automated underwriting is that underwriting data is captured digitally and therefore can be analysed in the future to further improve the underwriting process (thereby creating a reinforcing cycle and a potential source of competitive advantage).

Implementation approaches

The most common implementation approach is the 'managed roll-out' with the engine being used by the distribution channels that generate most new business for that company. Alternatives include using the engine to deliver a new channel or submission process such as internet or e-submission.

Implementation should be championed by the underwriting team who should also engage and excite distributors and include them in the planning and testing prior to launch. After the first phase, the solution can be adapted and rolled out to other channels. There is also significant focus on data analysis and optimisation of the rules, so the expected benefits can be realised and then exceeded.

Integration with digital front end, e.g. tablets and website

Insurers should look for scalable, multi-platform solutions incorporating:

- User configurable styles
- Channel-specific screen versions
- Ideally HTML 5 based user-centric interface that comes out-of-the-box that offers a platform agnostic responsive design allowing interface to be viewed on all devices (tablet/mobile/laptop/desktop). However, customisation should be allowed so that the user experience can be optimised for each device and each product
- Rules based systems that are easy to configure and are based on the accumulated underwriting experience of reinsurers
- Systems that exist and operate independent of back-end policy systems

Workflow systems

What are workflow systems?

There is a lot of misunderstanding on workflow systems with many organisations highly focused on executing and implementing specific business rules instead of selecting highly functional workflow systems and then fitting business rules to that new process. A good workflow system will have four capabilities:

1. Allow a 360 degree view of the customer to be maintained from a common communication capability covering emails, mobile and calls
2. Route work automatically to the correct individuals or groups – typically called Subject Matter Experts
3. Allow for exception handling using an email communication backbone that allows for internal escalation and referral as well as communication with distributors and / or customers directly
4. Inbuilt MIS that allows outstanding work to be easily identified and tracked as well as providing performance statistics on key metrics

How workflow compliments underwriting rules engines and improves the customer experience

Workflow allows organisations to route information electronically leading to increased efficiencies and turnaround times. Transparency and accountability are built into the process. Outlined below are some examples of where and how workflow engines can be used.

Area	Workflow impact and examples
New Business Process	■ Fulfilment workflows to issue cases that have been accepted by the underwriting rules engine ■ Integrating electronic signatures into workflow, routing updated electronic documents or forms directly to the appropriate personnel for processing ■ After policyholders electronically sign and submit policy information, the electronic forms are imported into that organisation's EDM (electronic document management) system. A workflow process automatically updates customer files to indicate what was submitted and when, and automatically enters another workflow to ensure that the form is routed to an underwriter for immediate follow-up ■ Determine cases requiring third party evidence or referral to an underwriter ■ Underwriting teams can use workflow to delegate work ■ Workflow software can eliminate bottlenecks by allowing organisations to distribute work according to specific needs; for example, organisations can distribute work to the first available user in a group, or to the person with the least amount of jobs to perform
Distributors	■ Receive fast and accurate instructions on medical underwriting requirements ■ Able to respond electronically with queries sage in the knowledge that their enquiry will be logged and managed (and not lost in a common email inbox that many underwriters are using today)
Customer experience	■ Complicated processes can be provided through a standardised toolkit as opposed to bespoke, inefficient and time-consuming production of customised work procedures for each new business rule ■ Faster turnaround times and more consistent and timely communication of outstanding requirements to clients

Workflow engine implementation approaches

- Start with a focused launch objective; e.g. use workflow to get instant / near instant issuance of clean cases below non-medical limit
- Use a generic workflow system that is largely configurable. Make sure this system has strategically been approved as the enterprise-wide workflow system (or will be as a result of a pilot with the underwriting team)

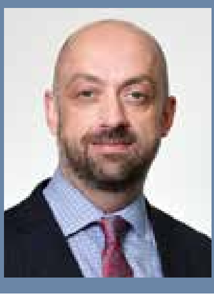
Concluding Remarks

Rules based engines and workflow systems go hand in hand and in combination will allow the transformation of the underwriting process for most retail or SME lines of business.

Swiss Re's Magnum Underwriting Platform and Mobile App

Swiss Re's automated underwriting solution is called Magnum. This system is specifically designed for the underwriting of life and health insurance and also includes an innovative underwriting app. for mobile devices. The app easily integrates into insurers' current agent or client apps, enabling customers to be underwritten for insurance anytime, anywhere. It intuitively takes the applicant through the risk assessment process, gathering key information, even when connectivity is not possible. Many applications are accepted automatically with concise, relevant customer information, making Magnum Mobile straightforward for the agent and the customer. Many insurers have already partnered with Swiss Re to implement the Magnum solution, including HDFC Life India and ClearView Wealth Limited in Australia. The benefit to advisers is improved efficiency, faster turnaround times and being able to provide a decision back to clients in a more timely manner and often at the point of placement.

"Magnum is a great underwriting engine and with our version of Magnum, advisers and their clients with straightforward applications will get a decision as soon as they hit the submit button"



- Simon Swanson, Managing Director at ClearView

For further information about the Magnum platform, please contact Swiss Re's Head of Magnum for Asia,
David Hodkinson: David_Hodkinson@swissre.com

Recommended for further reading:

1. http://www.docfinity.com/workflow-and-the-competitive-edge-improving-policyholder-services-with-bpm/
2. http://www.the-digital-insurer.com/the-digital-revolution-how-underwriting-is-changing-to-support-the-mobile-sales-process/

Latest Trends In Digital Underwriting

An interview with Swiss Re's leader responsible for innovation in underwriting

About The Interviewee: Oliver Werneyer

Oliver Werneyer is the Innovation Manager within the Protection Partners team at global reinsurer Swiss Re. Here he is responsible for driving innovation projects both locally and globally, with special focus on data, underwriting, technology and processes. Oliver has more than 8 years' experience of working with innovation and data through roles in product development, pricing, marketing, experience analysis, assumption setting, predictive underwriting, big data and wider innovation projects at major (re)insurers such as Liberty Life (South Africa), Genworth Financial (United Kingdom) and Swiss Re (United Kingdom). Oliver's other current responsibilities include managing a global partnership with a health management partner, supporting predictive underwriting projects globally and developing new concepts that aid the integration of technology, new processes and concepts for the insurance industry as a whole.

Q1. What is your role within Swiss Re?

I am the Innovation Manager within the Protection Partners team at global reinsurer Swiss Re. I lead various global innovation initiatives that look to modernise the way we underwrite, commercialise and use data, manage risks, engage with customers and just generally develop modern solutions using new-age technology and updated business philosophies. In addition to the innovation projects, I also support predictive underwriting projects, act as the global liaison for strategic partner relationships and support our data and analytics teams to build revolutionary data capabilities.

Q2. What are the five most important digital trends that are impacting underwriting around the world?

1. Quantified self (including wearable devices, internet of things, internet of everything)
2. Social Network Analysis
3. Mobile, e.g. interruptible underwriting, immediate connection/interaction, quick response

expected.

4. The rise of new kinds of insurance groups – organised groups to form a trust network
5. Behavioural economics and gamification

Q3. We have seen some examples of new 'social' insurance groups emerging – a sort of digital mutual insurer. How do you think these models will evolve?

One of the main examples that jumps to mind is the offering by 'Friendsurance' from Germany. They are embracing the social or group aspect of insurance by bringing together people and cover some part of the insurance responsibilities themselves, thereby reducing the premiums and having some control over the decisions. They do support the product with some features and responsibilities that an insurer provides to bring peace of mind to the customer, i.e. the very big claims, early claims and other extreme events. This is, in many ways, a hybrid of traditional and social and gives us a good look into how the insurance industry is slowly embracing these newer concepts. We might see more of these hybrid systems in the coming months but I would not be surprised if we see a fully social solution in the next 12 to 24 months, where no insurer will be required and everything around the offering will be non-insurance and fully user-experience driven. This is an interesting space to watch and many rumours of such services are floating around in the start-up circles.

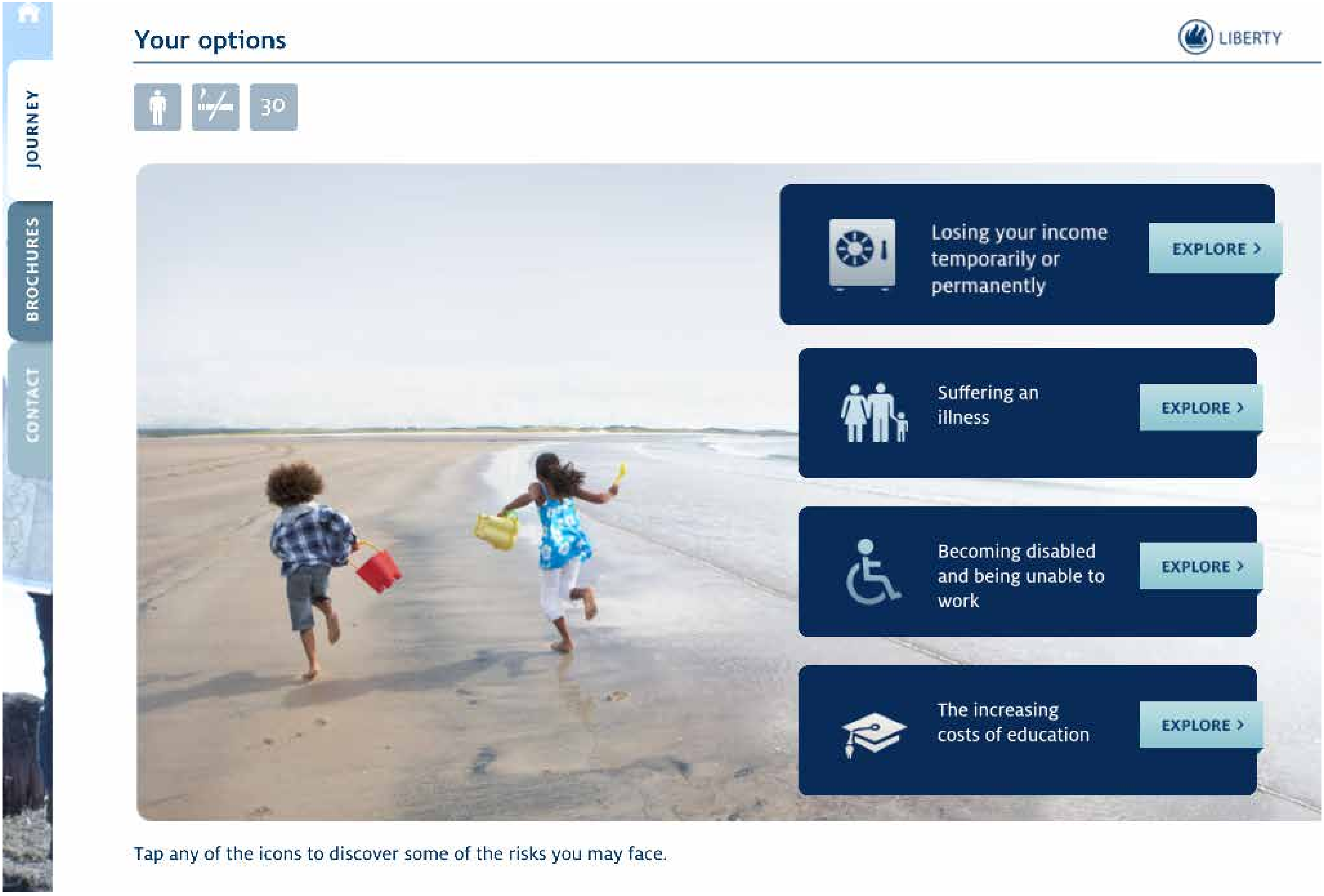
Q4. There is an increasing trend in the sale of simple life and health products being sold over the internet. What are the key success factors to make sure that these initiatives are successful?

Before analysing what trends are important we need to look at the journey a potential client would embark on. These days, customers would start off with intent to purchase but first require some education on the products and needs. There is and should be a major focus on developing solutions to educate the customer and then show how your products meet those needs. New engagement platforms, video styles, website designs, etc. need to be understood and employed to best reach your target market.

The next step is once the product is purchased to try and integrate it seamlessly into the customer's life. It needs to make sense in normal everyday life and adhere to normal engagement norms for that group. A lot needs to be done to understand how a specific market or group within a market wants to be engaged with and how they see the products and solutions fit in with their normal everyday life.

There is then an expectation that this is done via the newest technology and platforms and using modern payment portals. This expectation is not an irrational one and needs to be understood and embraced.

Q5. How important are point of sales tablet optimised solutions in the face-to-face process? What examples of innovation are you seeing on these devices to improve the underwriting process?



The customer journey where sales and underwriting come together

This depends on what your distribution model is but in my view this is a critical capability for any insurer. If you do direct only then you could use this tablet optimised sales process to engage the customer directly. If you have an intermediated sales model then this is crucial. It is about enabling your sales staff to engage with their customers to deliver better service more quickly. If it is done right it will be possible to transfer tasks to the customer seamlessly on the same platform. The customer can answer or do what is required of them via tablets or mobile phones and the advisor can continue with his tasks once the customer has completed his.

A great example is the sales tool that Liberty Life makes available to its sales staff. What is great about it is that it helps the advisor tell the customer a story that they can relate to and see how the product is put together. It is also designed in such a way that they could just upload it to the App store and make it available to the public so that they can use it themselves. They can build their own products that tell their own story. This is a single platform that can engage various stakeholders in the sales process.

Q6. We are seeing an increase in the amount of data on application forms being captured digitally. How is or will this information be used by insurers to produce better or more targeted offers to existing and new customers?

Receiving data digitally only has two benefits.

The first main benefit is cost and speed of policy issue. It can reduce the costs of getting the data onto the system and also increase the speed at which the data can be analysed and a decision made to issue the policy.

The second main benefit is that once it is available in digital format we can do more with it. This 'more' basically means that we can customise the offer and user experience as the answers are provided. This will make the offer feel more personalised and customised and also helps refine the sales message. A simplified sales message is easier to convert to a sale with a customer and is the reason why targeting is then so successful. This will improve the quality of the targeting as well as the frequency of it.

> *"A simplified sales message is easier to convert to a sale with a customer and is the reason why targeting is then so successful."*

Just capturing data digitally does not consider the fact that because data is now predominantly available in digital we could now get access to data we have never had access to before. That adds a whole new dimension to the discussion.

Q7. What trends are you seeing in the use of gamification and behavioural economics in the insurance industry?

We have seen many examples of gamification in the market and for me the best example is State Farm's (USA) needs analysis calculator (https://www.statefarm.com/insurance/life/resources/life-needs-calculator). It's an example of how you can engage people in a way where filling out drab and boring information becomes fun and you can't wait to see the next screen. Setting up application forms, calculators and information requests in this way means you have a highly customisable way of connecting with users and gives them an experience where they don't even realise that they are filling in boring information.

Behavioural economics is a hot topic at the moment and there are a lot of exciting things happening here. The way I see it is that behavioural economics helps you enhance the amount and accuracy of the data as well as helping guide people through options that could possibly confuse them. It also helps you frame a particular sales message and drive that message home via your processes and forms. Behavioural economics will be the difference between having a cool application form or gamified process that people like looking at and having an experience that gets people to take action. There is the classic example of a power company in California that tried to get its customers to use less electricity. Campaigns that focused on saving money and saving the environment by using less electricity had no impact at all but a campaign that highlighted they used more electricity than 90% of their neighbours had a dramatic effect. This recognition of the customer that makes irrational decisions can add real value to the way you do business and the value you can offer customers. The difficulty is not in knowing what behavioural economic concepts there are that can be used but when to use which of these concepts.

Q8. Increasing amounts of personal data is being stored on social media. With customer permission how can this data be used to improve the underwriting process or offer new products to customers? Are there any examples of Facebook profiles, for example, being used by insurers?

There is this desire in the industry to use social media data in the application form and some work has gone into exploring this. What I have learnt from being involved in such projects is that understanding how people use such platforms will help us understand whether there is any value in the data.

From a marketing perspective there is a lot that can be done. This is not unique to the insurance sector but an opportunity that is available to any company trying to sell something and engage with customers through social media. It's all about understanding what people like and engage with and there are many companies out there that can help insurers with this.

The impact on the underwriting process or any risk related insights has been limited but is something we continuously monitor. There is this view that by using social media data we could reduce the underwriting questions or reduce the premiums charged but we have not found any evidence yet that suggests this is doable. The problems faced are around the fact that a lot of content on social media is picture or video based and we don't know what's in them. The other problem is around sentiment analysis where we first need to determine the context in which key phrases are used before understanding whether it has a positive or negative impact. Once you combine these two problems then you realise there is a lot of content in social media that we cannot accurately assess yet and thus cannot really use to assess the risk.

> *"This recognition of the customer that makes irrational decisions can add real value to the way you do business and the value you can offer customers."*

What social media could be used for is cross-checking. An example is to build a model that could predict someone's smoker status based on their social media data. When a customer provides a response to the smoker question that contradicts what the model says then we can decide on an action. If the person says he is a non-smoker and the model predicts that he is probably a non-smoker then accept the answer without requiring a medical test. Where a customer indicates he is a non-smoker and the model predicts him to be a smoker then send him for a medical test to be sure. This way you can use the data to cross-check and reduce onboarding costs.

For now social media data is great at giving us an overview of what is happening in a population of lives but can give us very little useful information on an individual. As technology, data and models improve we might revisit this as a source of predicting individuals' health.

There is an insurer called 'Malayan Online' where the sale can be concluded in Facebook and you can use your Facebook data to complete some of the data fields but to my understanding they neither use it to predict health or reduce underwriting questions nor to target certain people. It's just a way of using data that is on your social media profile to complete the form.

> *"What social media could be used for is cross-checking. An example is to build a model that could predict someone's smoker status based on their social media data"*

Q9. Wearables have been in the news a lot this year with the announcement from Apple, Amazon and Samsung. What are the latest trends and pilots in the integration of wearables in the underwriting process?

The concept of wearable devices has been around for a while and we see a lot of new devices being launched. Tracking one's health is also not a new idea but seems 'trendy' because there are so many new devices being launched.

The most important trend is that the main operating systems (Apple, Google, Samsung, etc.) are now making this part of their operating system coding. This is an important trend because currently you have multiple devices storing data in multiple applications meaning we still don't have a comprehensive view on our health where all data is shared.

Once this is possible then we see the true emergence of the Quantified Self. Having this data in a central repository and made available for analysis is the most important trend as it will allow better analysis that takes all data into account.

This trend is one of the main ones we at Swiss Re are focusing on through various ongoing projects that are exploring the potential and developing the technological competency to deliver on these. We are helping our clients get ready for the future of data and engagement by truly revolutionising everything from products and underwriting to engagement and data analysis. If an insurer is serious about being ready to embrace and make full use of these developments then they can chat to us and see what we are building.

Predictive Underwriting: In Theory and in Practice

Discover what predictive writing is, its benefits and its useful lines of business

Part I: Predictive underwriting overview

Introduction:

Traditional underwriting has consisted of the search for meaningful insight into individual policyholder risk characteristics that would improve the underwriter's ability to distinguish good risks from the bad and to accurately price each risk accordingly. However, the traditional approach can have limitations such as not all data taken into account, slower response times and a natural human bias.
Over the past few years, a new trend of predictive underwriting has emerged which offers underwriters a statistically sound, objective and consistent method to improve underwriting and pricing sophistication which can in turn improve the bottom line.
The first part of this article explores how insurers are increasingly using predictive models to improve risk selection, the positive impacts across the value chain of using such techniques and implementation approaches. The second part leverages Swiss Re's extensive experience in building predictive models and looks at some practical guidelines for insurers looking to implement predictive models.

What do we mean by predictive underwriting?

Predictive underwriting is the use of intelligent data on consumers to predict the relative risk of an individual policy in the future policy term. Historical internal data on the insurance line is examined, along with any relevant and available external data, to predict underwriting outcomes. The concept is based on the 'propensity to buy model' used in other industries such as retail to use predictions to develop more profitable relations with their customers. An example within insurance is in the health segment where predictive models can be used to determine correlations between lifestyle factors and mortality.

What lines of business does predictive underwriting work for?

Predictive models have proven to be effective for most lines of insurance, from property and casualty lines to healthcare and motor. For example, it is common for motor insurers to use credit scores to evaluate risk, as a good credit rating is an indicator of how responsible a potential customer is. In contrast, and perhaps due to the longer-term contracts which means risks are typically written once and less frequently switched to another provider, life insurers tend to be behind the curve in using predictive models. In addition, the idea of data (for example banking data) informing underwriting is somewhat of an alien concept for most life insurers. This also partly explains why banks have been the first adopters of these techniques as they are used to using data to make predictions, for example, pre-approved credit cards.

What are the benefits to stakeholders of predictive underwriting?

Figure 1 below outlines the key benefits to customers, insurers and distributors of the use of predictive underwriting.

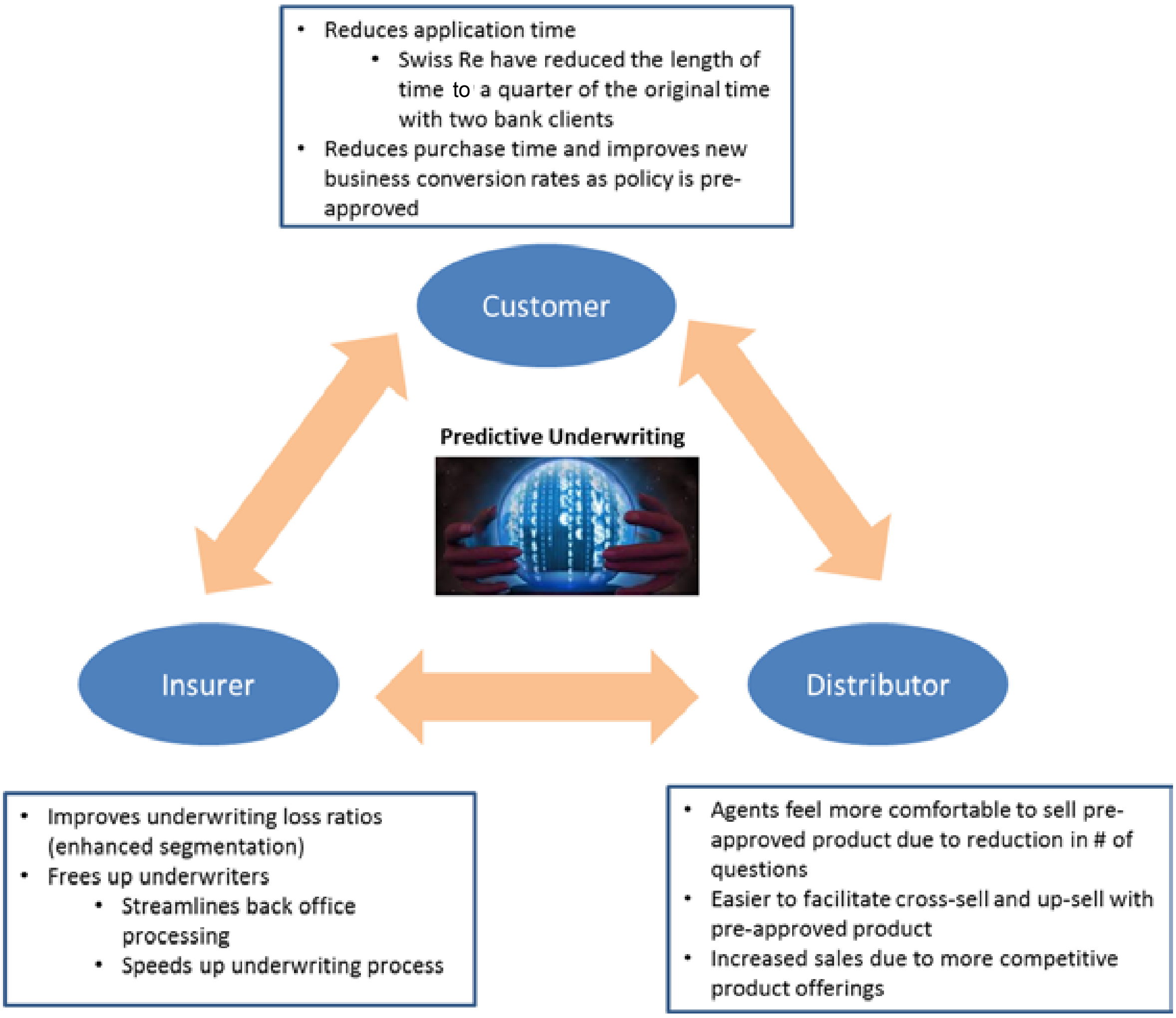


Figure 1: The benefits to stakeholders of predictive underwriting

What is the process used in predictive underwriting?

Figure 2 outlines an example predictive underwriting process and the key steps required to build and implement a model.

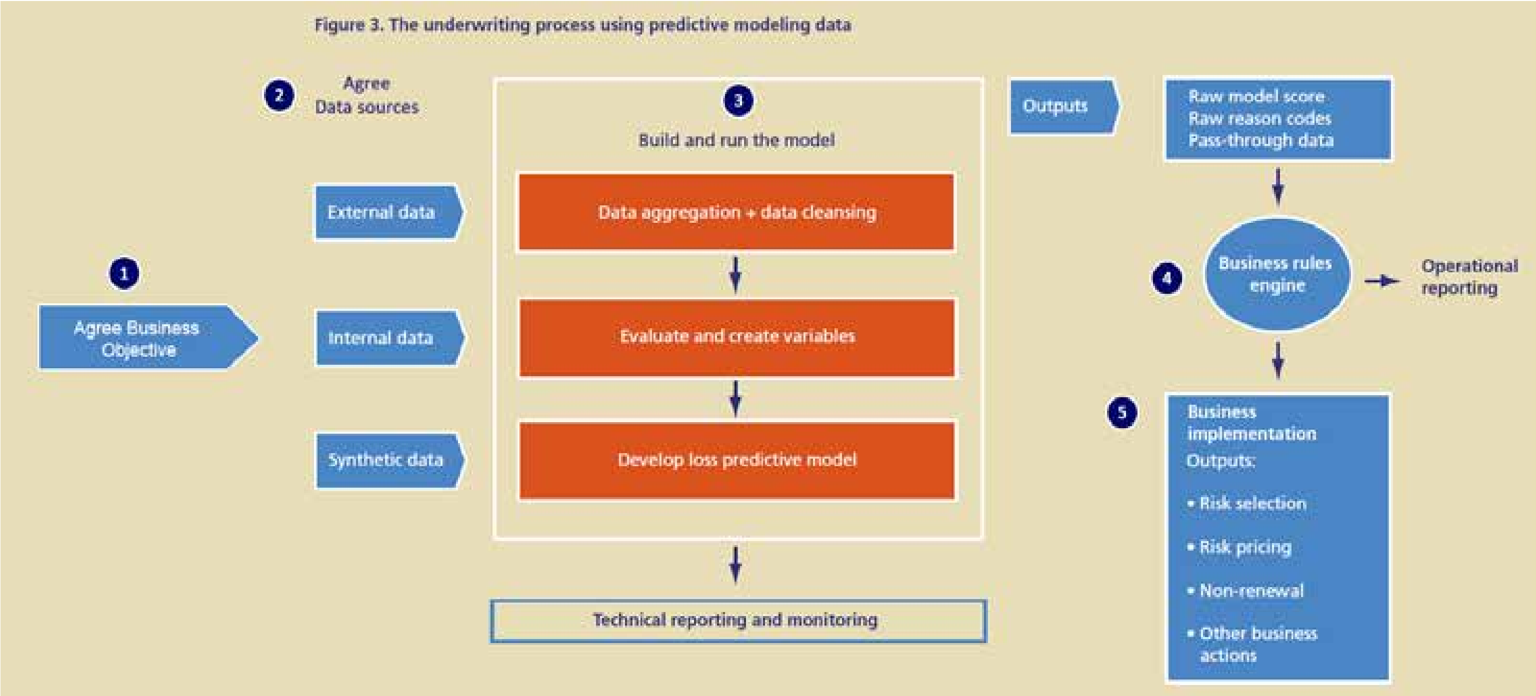


Figure 2: An outline predictive underwriting process

1. Agree what the business is seeking to predict (e.g. is it health, purchase, lapse?) as this will hugely influence all subsequent steps, including what data is needed and what statistical techniques are used
2. Agree data sources (external, internal and synthetic)
3. Build and run the model
    a. Data aggregation and data cleansing
    b. Evaluate and create variables
    c. Develop loss predictive model
4. Run raw model score and create business rules engine
5. Implement business outputs, e.g.
    a. Risk selection
    b. Risk pricing
    c. Non-renewal

Implementation hints – how do you ensure success in a predictive underwriting initiative?

Insurers should plan and execute a sound business and technical implementation strategy. A typical implementation process is shown below:

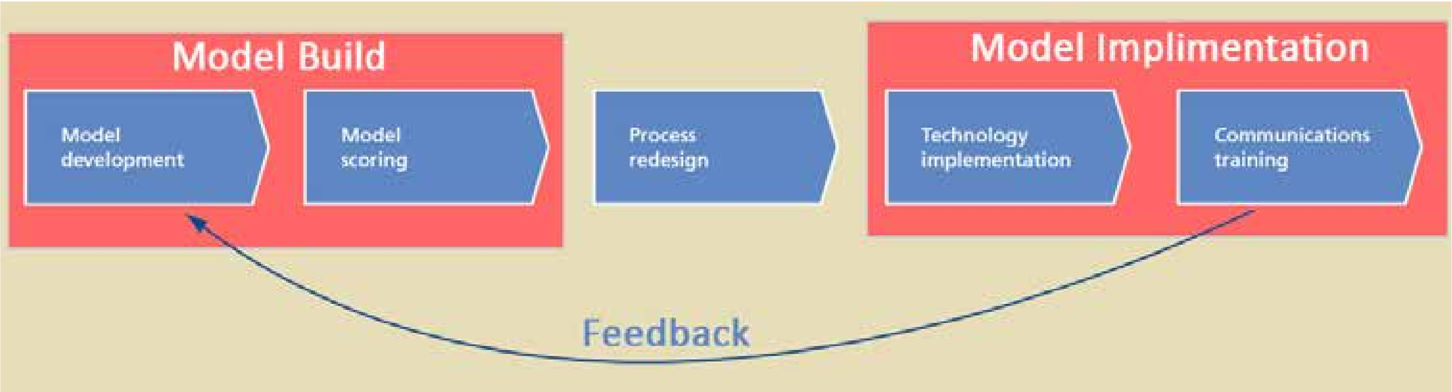


Figure 3: A typical implementation process

Quite often, the model-build stage of the process is relatively easy, but it is the model deployment which is harder. For example, if a model is built that pre-approves 20% of banking customers for a one question underwriting process, then this will only show any value if the sales agent can identify at the point of sale who those 'pre-approved' customers are. This means that an identification tool (e.g. on the sales agent system) needs to be built, and all agents trained on what to do in this scenario. This can be the part of the process that is lengthy and difficult to implement.

Part II: Lessons from predictive underwriting in life Insurance

The section above looked at some of the key theoretical aspects of predictive underwriting as well as some implementation considerations. But what other factors should insurers consider when implementing predictive models? Swiss Re has 12 years' experience in building predictive models for life insurers and the following section leverages this experience and offers five practical guidelines for developing predictive analytics and models.

1. Start with the end in mind

This may sound obvious, but there are bad examples within and outside the financial services of people 'doing big data' without a clear business goal in mind. We start by asking the question: what are you seeking to achieve?

There are many outcomes insurers may be seeking to achieve with their data. These include: reducing the underwriting process for healthy customers; improving retentions; increasing responses to marketing activities; or differentiating on price between customer groups. Targeting clear goals is crucial in order to acquire the necessary data and run the appropriate analytics.

2. Be realistic about limitations

There have been some far-fetched promises about what big data can achieve, but the effectiveness of data is frequently constrained. Swiss Re has invariably found that the strongest health predictor models are those that are built from scratch on a bespoke basis. By definition this means that past data is needed of sufficient quantity and quality – and this is not always available. Bancassurers have heavily invested in bringing their data to the point where it is an asset. As a consequence, they are now exceptionally well placed to take advantage of their data – and this is where Swiss Re has done most of its work to date. Typically, their wealth of past sales data – including underwriting decisions and claims – means that, when matched to banking data, unique insights can be learned by applying our statistical techniques to the anonymised data-file.

Strikingly, we have observed vast differences in the quantity and the quality of data held by our clients, even by banks.

3. Imperfect data is no excuse

Insufficient or poor quality data is frequently used as an excuse for not doing anything at all. This is a mistake – as Eric Siegler states in his book on predictive analytics: "a little bit of prediction goes a long way". Even those insurers with relatively weak data can – and should – be using it to make some improvement to their processes. We recommend exploring what can be done – rather than what cannot – with the data that is accessible.

Just five years ago, life insurers would ask whether they should be doing this type of analytics work, whereas now they are asking how they can do this. This is a good sign.

Life insurers frequently ask about different types of data-sources, and how they could be used to predict health, purchase or lapse. These are our learnings to date:

- Agent/broker data: Only suitable for predictive modelling if the data is held by all brokers in a consistent way – which is typically not the case. Even then, questions remain about the depth of the data, i.e. how much information is held on each customer.
- General insurance data: Suitable for predictive analytics of risk, purchase and lapse, but we find that this data is typically quite shallow, with only a few variables held consistently on each customer – maybe 15-20 in total. Thus, we need to be realistic about the likely strength of a predictive model built this way.

> *"a little bit of prediction goes a long way"*

- Third party data sources: These can have very strong predictive power in markets where the data source has good breadth (covers most of the adult population) and depth (a number of data fields). The US and the UK have proved best for this kind of information.
- Loyalty card / supermarket data: This is frequently as strong – if not stronger – than banking data. The challenge is persuading these providers to extract/ share their data.

4. Data cannot do everything

Many of us who work in predictive analytics are at risk of believing that, given the right data, we could make perfect predictions. Unfortunately, this will never be the case. For a start, models make mistakes (e.g. the customer with a low propensity to lapse decides to cancel their policy). In addition, we find that customers frequently do not behave the way we expect them to.

Life insurers must develop models suitable for their data. The response to a new online product cannot accurately be predicted by using past data for products sold face to face with agents.

> *"Strong results can only be expected when good analytics come together with strong sales (or retention) processes."*

Analytics can help improve the process but strong sales methods and messages remain important. Strong results can only be expected when good analytics come together with strong sales (or retention) processes.

The growing body of evidence emerging from the field of behavioural economics is a helpful reminder that we are not the fully rational individuals we think we are – or claim to be. With this in mind, Swiss Re takes a 'test and learn' approach to all our data modelling. Only then will we determine the true drivers of customer behaviour.

5. Big data – lots of talk, little action

All life insurers are now converts to the idea of big data in principle. In practice, the life insurance industry as a whole has been slow in making use of the data they have access to.

Our work has proven that much can be achieved through matching life insurance data with other descriptive data (e.g. bank, general insurance data) in order to predict health, purchase or lapse. Some life insurers have led the way on this. We hope that many more will follow.

All the above are just some of our learnings to date and not any sort of final conclusions. Data modelling and predictive underwriting is a constant learning process and we are continually working with our clients to maximise its effectiveness.

Bancassurance mini case study:

In the past four years, Swiss Re has launched a predictive product in the UK for three of the top five bancassurers.

- In all three cases, strong buy-in from both parts of bancassurer
- Strong models were built due to rich banking data available
- So far, distribution methods are: direct mailing, outbound telephony and internet pop-ups
- One partner now extending this to a global proposition in partnership with Swiss Re
- The main 'win' is for the sales agent, who feels more confident to sell this pre-approved product due to the reduction in medical questions
- One client quoted: "We see predictive underwriting as the future of life protection"
- In the past two years, we have also built predictive models in the US, South Africa, Hong Kong, Thailand and Portugal

Further reading:

1. *Advanced analytics and the art of underwriting*, Deloitte

Smart Underwriting Is Better Than No Underwriting

An opinion piece from Andrew Gething, Managing Director of MorganAsh.

About the author

Andrew Gething is the CEO of MorganAsh having founded the company in 2004. MorganAsh is a leading underwriting specialist for financial services, working in the UK, Ireland and Germany.

Andrew is a highly successful entrepreneur who has taken an IT start-up through growth and profitability to successful acquisition. Andrew is a Structural Engineer graduate, previously a Chartered Structural Engineer.

Underwriting is out of favour at the moment, and we are seeing a trend towards simplified underwriting, simplified products, shorter questionnaires and higher priced products taking on more risk. These initiatives are aimed at improving the customer journey and increasing sales by dropping the 'cumbersome' underwriting elements. However, there is little evidence to show this approach is working; for example, in the UK sales continue to fall. This article takes a contrary view and explores how we can use underwriting to increase sales.

The changes taking place within underwriting are well documented, including how the traditional underwriting process is no longer appropriate. However, there are several areas of the sales process that can be enhanced in order to make underwriting a positive part of the sales process rather than a negative. We take a look at each of these in detail below.

1. The integration of the sales and underwriting process
2. Providing a personalised sales and underwriting journey
3. Promotion of underwriting as a personalised assessment

4. Improve customer expectations by giving rated prices up front rather than starting with a standard price and then increasing the price
5. Engaging with the consumer

1. Integrating the sales and underwriting processes

In the UK online systems already provide ratings at the point of sale for around 60% of consumers for life and critical illness products, but there are still 40% of consumers (and all those that need disability products) that are not covered by these methods. To provide a positive customer journey, a process that integrates the manual and the automatic underwriting into the sales journey is required. While this could be instant, it is more likely to have a short delay while the manual underwriting takes place. This is not the end of the world; it can be an integral part of the sales process as we shall explain further below.

2. Personalised underwriting

In the times when paper forms dominated, the process had to provide a standard set of questions to every applicant. But now that we have technology, every set of questions can be bespoke for the consumer. In online and tele-sales processes this is already done for gender and product with questions only asked if they are applicable. It is proposed that this can go a lot further. For example the information gathered can be made dynamic based on age and the distribution channel if it is the consumer, or, if an agent is asking the questions, the amount of insurance required, by duration and amount. Hence in effect we can dynamically move from a 'simple underwriting' to a 'full deep underwriting' approach depending on these many factors.

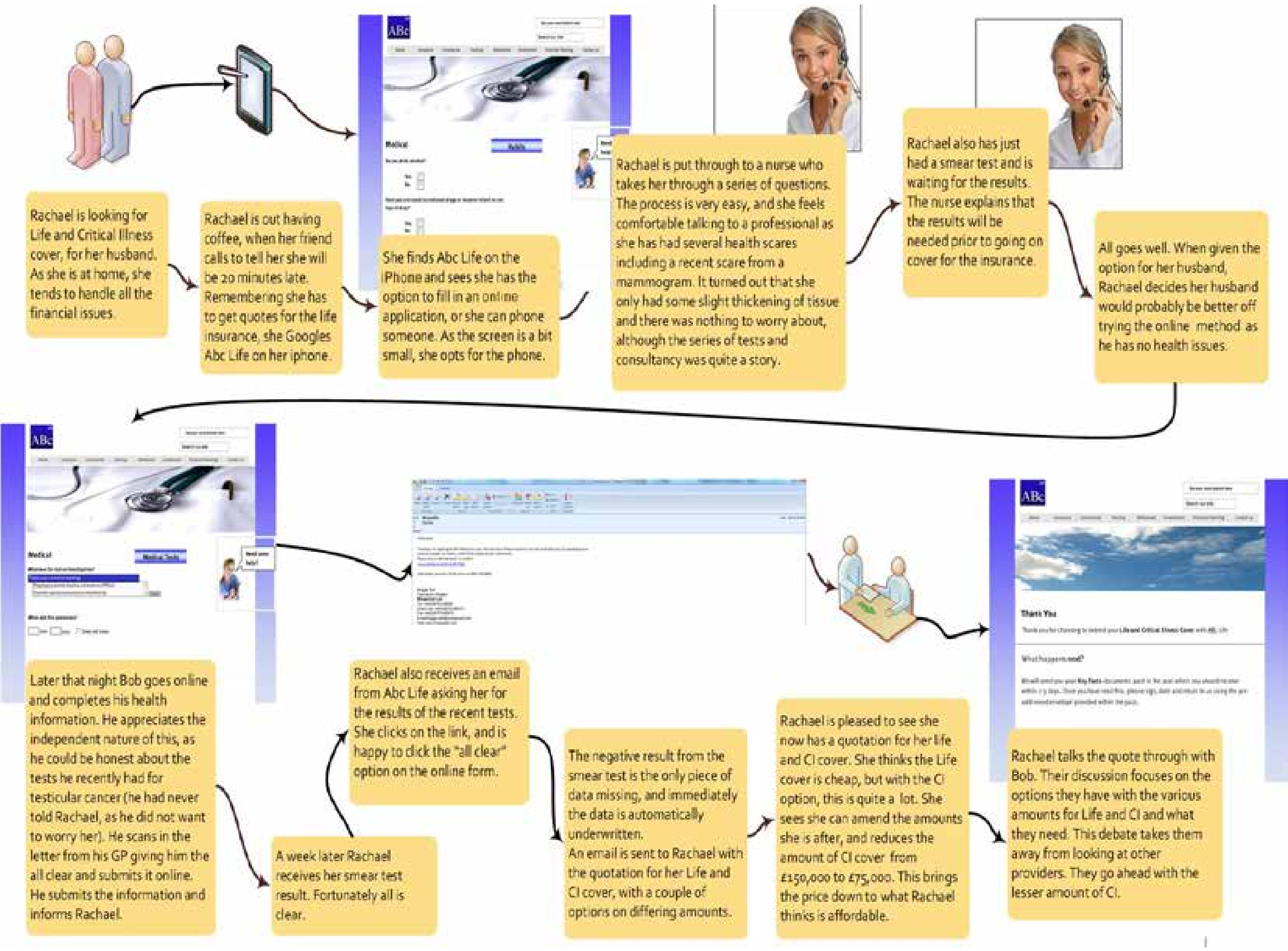
> *"To provide a positive customer journey, a process that integrates the manual and the automatic underwriting into the sales journey is required."*

In addition, the questions can be made conditional upon the questions already answered. If the consumer changes the answers, questions to validate this change can be triggered. The quality of the agent undertaking the interview, if the interview is voice recorded, can all trigger different risk profiles in line with the risk of anti-selection and non-disclosure.

Not only can the questions flex for risk reasons, but also for the customer journey, making reference to the process so far, and predicting the next steps of the process, specifically for each consumer.

Question sets and scripts have been built purely focused on collecting risk information. The next step is to start amending these scripts in line with custom engagement, both in design and dynamically.

3. Promoting underwriting as a personalised assessment



People like to be treated as an individual and don't like to be treated as 'standard'. The underwriting process is bespoke for each individual. Automated or manual, it is an assessment of the individual's unique circumstances. Unfortunately this great value is hidden by a process that treats everyone the same. However, by using technology such as online, phone or live chat we can manage every consumer individually and give them feedback that is individual to them. The value of this individual assessment should be promoted, making the consumer feel they are being treated as an individual.

Examples could be: "This will be individually underwritten and will be personal for you. It does mean that if you are unfortunate to claim, you will be covered, even though you have had some conditions before."

Because we are in the finance industry we like to talk to our customers about finance, and we avoid the medical issues as we are uncomfortable talking about them. However, most consumers are more at home talking about medical issues than finances. Culturally greeting across the globe to enquire about people's health, for example "How are you", and financial matters are often taboo.

So in reality asking people about their health is perhaps not as big a barrier as one would expect.

4. Rated and standard prices

It is well documented and understood that the common practice of quoting 'standard' prices and then increasing them with rating or exclusions leads to reduced rates of sales for these rated cases. So much so that many processes just avoid the rated cases, either officially or probably in far greater numbers unofficially. Most research tells us that the consumer overestimates the price of insurance, and it is the belief of many that the process of giving a low price and then increasing it later is a major factor is turning these consumers away from their purchase.

Online automated underwriting systems have enabled the provision of rated prices up front in the sales process for a proportion of consumers and this is great progress. There are some new services that offer indicative underwriting to improve the process. These solutions are incremental improvements to the existing process to reduce the 'standard price' sales detractor. While these are steps in the right direction it is proposed that in the future we can go further than this by integrating our underwriting and sales process completely. Underwriting processes can be undertaken in parallel with sales, rather than afterwards in series. For the 'clean' cases this will have no impact; for those with conditions it will allow for automated and manual underwriting, at the time of a sale. It takes less time for an underwriter to make an underwriting decision, than for a consumer to complete an online form or a tele-interview to collect this over the phone. Underwriters could view this data in real time and give instant decisions, although probably allowing a short delay of a few hours is probably more practical for resourcing reasons.

> *"The STP fad is over and it's time to focus on consumer engagement and make the process itself more enjoyable rather than simply try to eliminate it."*

We underwrite early in the process and quote an indicative underwritten price, and hence never quote a 'standard' price. We manage the affordability issue up front, thus managing expectations. While this may qualify out some consumers at the start of the process this is far more efficient and consumer friendly than qualifying them at the end of the process.

5. Consumer engagement

Tele-interviewing and the automation of processes online have been two great improvements within underwriting over the last ten years as the industry has largely moved away from paper. Both approaches are dynamic, allowing changes in line with the inputs, whereas paper was a purely static one-size-fits-all process. The main focus of these systems has been to reduce our transaction costs and speed up the process, and they have been very successful at both of these pursuits. However, the truth is sales are going down and the majority of transactions started online are in fact completed offline. There are many reasons for this, some due to the awkwardness of the process but mostly due to the old adage that 'products are sold and not bought', and the human touch is still needed to make the consumer feel comfortable about their purchase.

While some insurers still pursue increased automation using STP (straight through processing) rates it is proposed that we should turn our attention to increasing our engagement with the consumers. The STP fad is over and it's time to focus on consumer engagement to make the process itself more enjoyable rather than simply try to eliminate it.

Part solutions to the above already exist in various forms. For example, experienced protection advisers manage the consumer's expectations through the process, treating them as individuals. However, these are in the minority and this is difficult to replicate in Direct to Consumer channels. Most online processes are handed off to a telephone sales team who talk the consumer through the process. The usage of Live Chat is encouraging and allows underwriters to talk to consumers about their likely rating prior to proceeding with their application.

Technology is also helping us, with the ability to merge tele-interviews and online applications so consumers can choose the way they want to buy. The increasing use of smartphones and tablets drives us to shorter, more personal engagements using voice and text for now, and video in the near future.

At my company, MorganAsh, we are using underwriting as part of our consumer engagement, and it works; we have double conversion rates for our clients. While not for everyone, and far more complex than the 'simple' approaches, it is not uncommon in other industries for simplicity to be presented from complex systems behind the scenes. Simple consumer engagement with full underwriting in the background will provide the best price solution, and hence over time I believe will rise in popularity.

Andrew Gething

Founder and Managing Director

MorganAsh

The Digital Insurer Reviews the Swiss Re Sigma Report on ‘Digital Distribution: A Quiet Revolution?’

Swiss Re Sigma have recently published an interesting global report on Digital Distribution.

In this article The Digital Insurer reviews the report and takes a look at some of the findings and implications from the perspective of insurance businesses in Asia Pacific. As such it is not intended as a comprehensive review but it is aimed at the reader who wants to understand the key insights from the report within the specific frame of reference of life and health insurance in Asia. The views expressed in this review are those of The Digital Insurer.

Review Coverage

We have split the review in to the following three sections:

1. Online insurance – trends and observations
2. The impact of mobile devices
3. The promise of digital marketing

Section 1: Online Insurance – trends and observations

In this section we focus on major trends that are discussed in the report.

Trend 1: Changes in customer behaviour

The report highlights how the internet is ‘fundamentally affecting customer behaviour’ at all stages in the value chain. Figure A, from the report, captures succinctly the stages of the sales and post-sales process that will be impacted by digital trends.

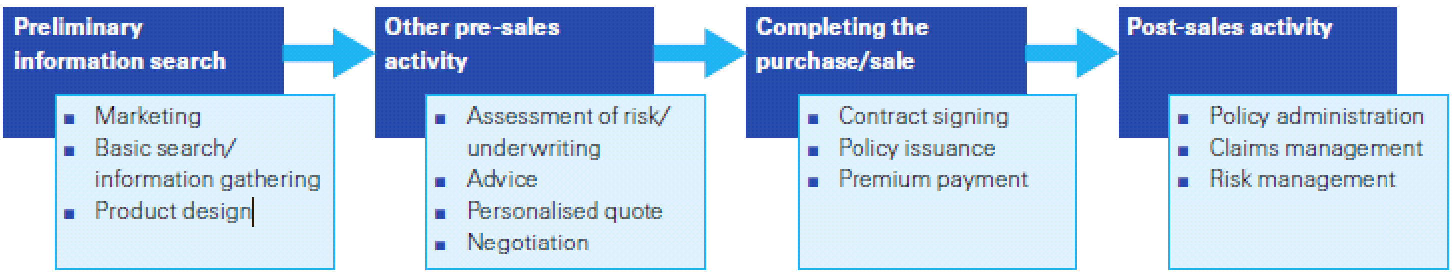


Figure A: Digital thinking changes all of these processes

Swiss Re report that around 60% of sales are ‘intermediated’ but for life insurance in Asia Pacific this is more than 90%. This difference is significant and has two implications for life insurance in the region:

1. There is significant benefit from applying digital thinking to transform existing ‘intermediated’ channels – namely agency and Bancassurance channels. Digital can both improve quality and reduce costs simultaneously
2. Unless Asia is different from other parts of the world there is likely to be a growth in direct, presumably digital, channels in the next few years in response to the underlying change in consumer behaviour

The Sigma report summarises the implications as ‘technology-led shifts in distribution which increase transparency, empower customers and lower barriers to entry in some markets, which can lead to further commoditisation of insurance products. Successful insurers in the more price competitive world will be those who can build trusted brands and reputations for good service.’ Whilst we might rightly question the speed at which price competition will become common it is difficult to argue against the strong secular trends identified. As a result the ‘no change’ or ‘business as usual’ strategy is looking particularly risky over the next few years.

Trend 2: Multiple touch points – the cross channel customer journey

Swiss Re have identified how important the new multi-channel, customer centric world is becoming. Figure B below, from the report, is one of the best diagrammatic references to this cross channel customer experience that we have seen

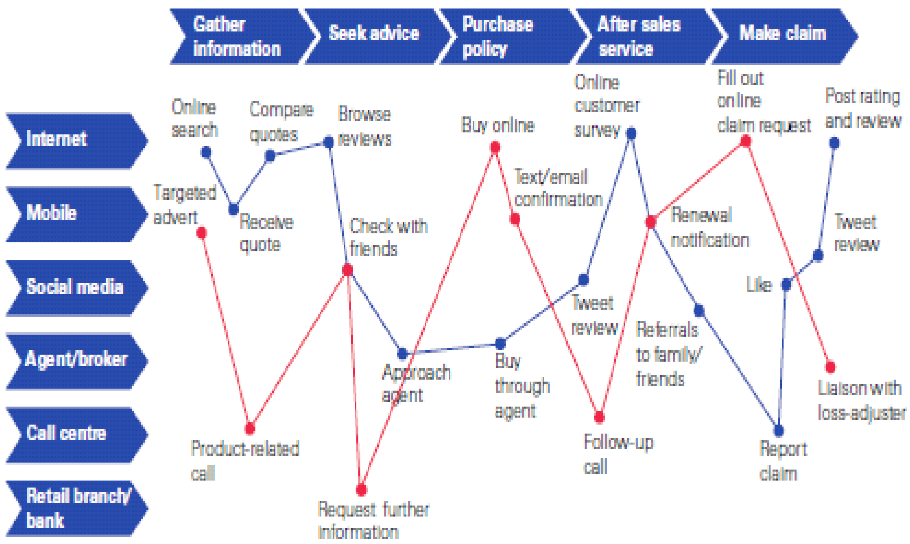


Figure B: The Digital World breaks down thinking based on 'distribution channel'

This new customer behaviour is challenging for insurers on two key dimensions:

1. Distribution centric models with organisational hierarchies to match are particularly poorly suited for the customer centric approach to business that is now required. Instead of ‘online’ being a new distribution channel insurers need to grapple with the more complex task of threading digital across all touch points
2. Very few insurers have the technological backbone of CRM/Case management systems to allow a genuinely integrated 360 degree view of the customer. Operational silos abound – ranging from intermediary activity that is not recorded, call logs maintained for call centre use

and marketing outbound activity that is not logged against the customer record for use by sales or customer services

Trend 3: The importance of the internet in the search process

The Swiss Re report has identified that consumers are increasingly researching online. The US data provided for 2012 estimated that 75% of individuals search for auto insurance information and 61% of US consumers researched life and annuity policies.

Figure C from the Swiss Re Report shows how the internet is already the most important source of information in Developed Asia and we can expect to see the same within Emerging Asia soon.

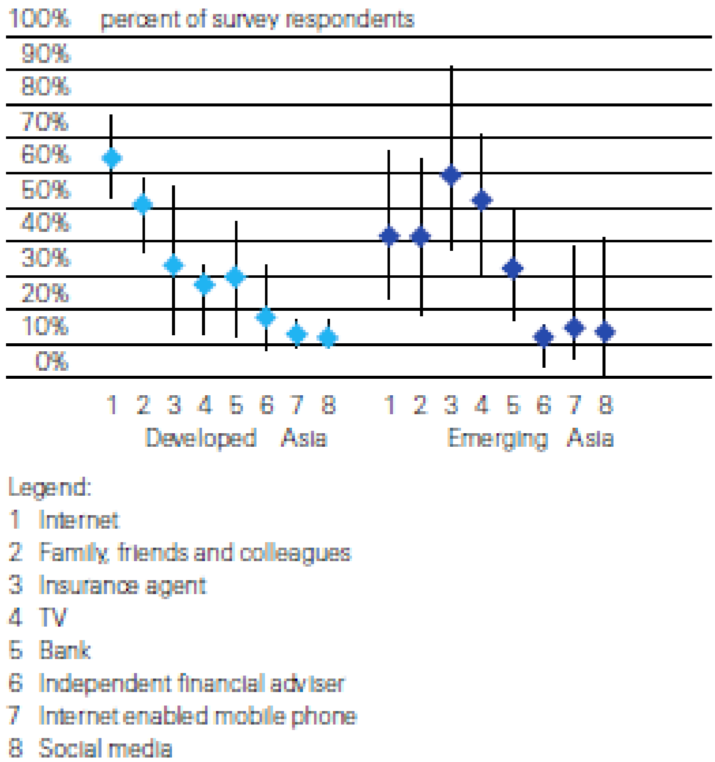


Figure C: Sources of information on financial services – the increasing importantance of the internet as a source of advice

The implications for face-to-face life insurance models, particularly agency models, in the longer term are:

- It is likely that more leads will be generated from engagement with online content than from the relationships of the advisor. This is particularly true for new advisors
- Insurers will need to invest in mechanisms to capture and categorise customers' online interest and route them to the appropriate advisor. Content strategies will become increasingly important
- It will not be long before customers will expect to see advisor profiles online and to be given the choice to contact the advisor they are most comfortable with

On the counterside, insurers who fail to invest in providing an engaging online experience for customers will struggle to acquire new customers – they simply won't know that the business has gone to one of their competitors.

In the UK comparison sites are trusted more than financial advisors – and this trend could be set to continue, with some research indicating that online 'avatars' are preferred as impartial sources of information on health and financial services matters in the early stages of the search process.

Trend 4: Online buying habits

Figure D highlights the current position in Asia – high use of insurance agents and bank staff for both life and non-life sales and relatively low use of the internet. No doubt sales via the internet are set to increase as the younger generation becomes consumers of insurance. However, the measurement of sales by 'channel' is set to become more complicated as consumers move to a multi-channel sales experience. It is likely that in the not-too-distant future someone selling insurance will offer their customer online options, video conferencing, co-completion of proposals in additional to face-to-face. So in essence all channels will become 'digital'.

2. The device of choice

Smartphones have rapidly become the device of choice for consumers and in Asia, emerging markets are expected to have a smartphone majority within three years. This surge in connectivity provides insurers with a new 'window' to engage with new and prospective customers.

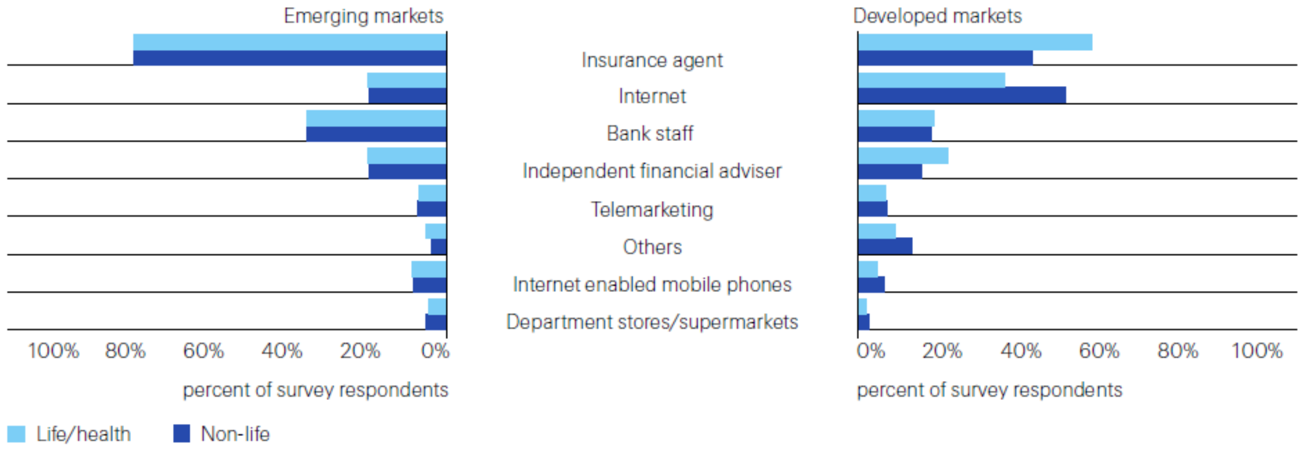


Figure D: Online buying habits – channels consumers would use

Section 2: The impact of mobile devices

The Swiss Re report has an excellent section on the impact of mobile devices. Key areas of interest in our opinion are:

1. The promise of mobile telematics

The report estimates that the number of telematics-based monitored drivers will be just less than 90 million by 2017. This data provides new ways to price risk – as well as providing data to allow consumers to change their driving behaviour (this site is a great marketing example: http://www.drivelikeagirl.com/). With the launch of Apple's iWatch and their stated interest in building a health ecosystem we could well find an acceleration in biometric data capture on mobile devices

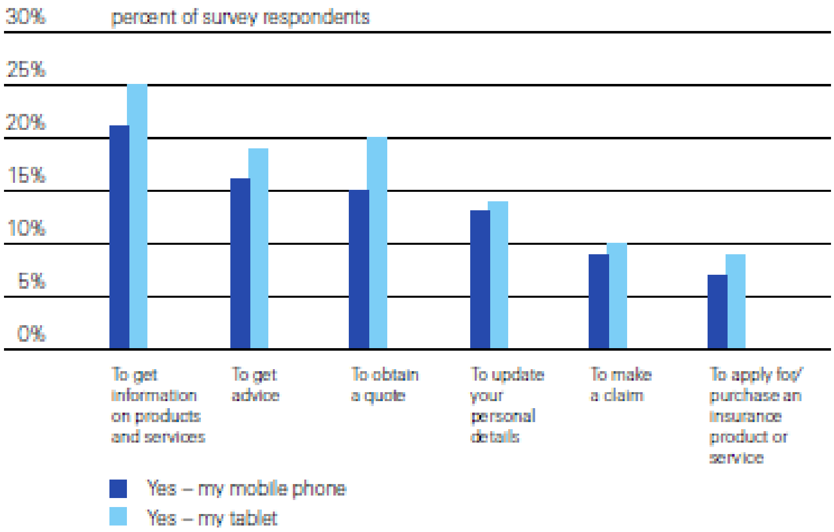
Figure E shows the usage of smartphones in insurance in the US. Given the multi-channel nature of sales and service delivery insurers will need to focus on seamless smartphone to call centre / financial advisor service delivery

3. The importance of design to build customer engagement

One of the key success factors in the use of mobile for insurance services will be the optimisation of the experience. Close attention to UI/UX design and the use of gamification techniques will become commonplace – Swiss Re have identified some of the early adopters as Inshared, Progressive, USAA and Friendsurance. Insurers will increasingly recognise the need for agile front-end development capabilities

4. Mobile micro insurance

Mobile devices change the economics for the delivery of small value insurance solutions. We can expect to see a rapid increase in simple products delivered and purchased using pre-paid credits and increasingly mobile wallets



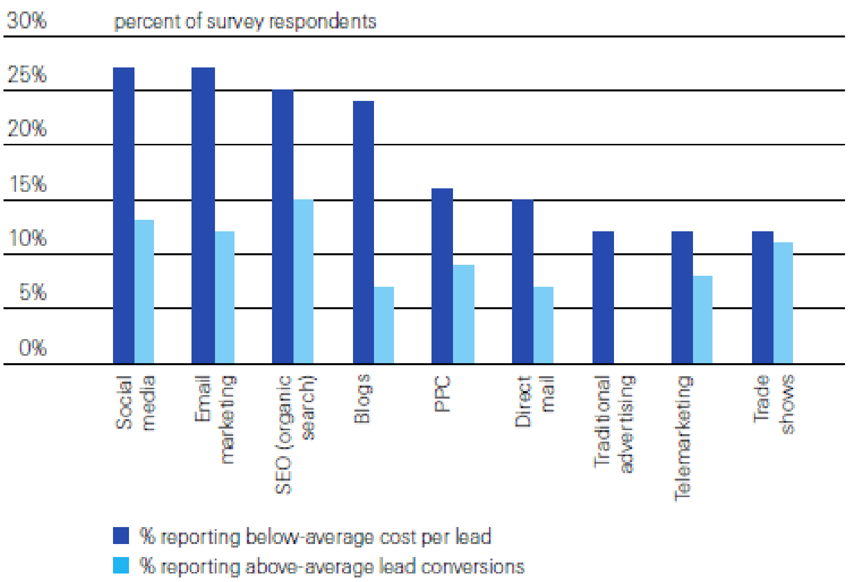
Note: Share of positive responses to the question: "Have you used your mobile device in the past two years to deal online with an insurer?"

Source: "2013 Consumer-Driven Innovation Survey." Accenture (2013)

Figure E : Smart phones are multi-purpose

Section 3: The promise of digital marketing

In Figure F we see data that illustrates how much more effective digital marketing is for lead generation with social media, email marketing, SEO and Blogs as the most cost-effective lead generation tools. Insurers will likely have to invest considerable time and effort in content-based activities designed to firstly drive engagement and subsequently sales opportunities.



Source: "State of Inbound Marketing", Hubspot (2013)

Figure F: The power of digital marketing

Concluding remarks – is it really a quiet revolution?

The Digital Insurer believes the digital revolution in Asia Pacific will be profound and will happen faster than most insurers currently expect. Winners in various categories such as best digital agency, best digital Bancassurance and best price aggregator will start to become clearer in the next couple of years. Those insurers who adopt digital thinking to mould their strategies, find the financial and human resources for new initiatives and take a three to five year timeline for the full development of new models are the ones that are likely to be successful. Senior executives chained solely to next quarter's financial results, and incentivised accordingly, are unlikely to be at the vanguard!

Figure G below shows that outside of Asia the majority of incumbent insurers are expecting external competition. Are you willing to bet that Asia will be different?

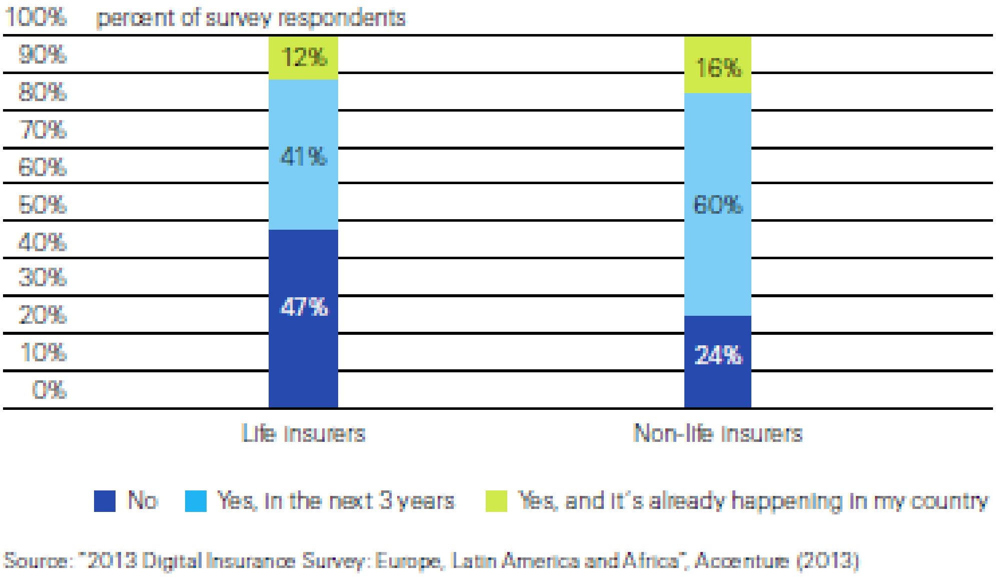


Figure G: External Competition is coming

Full Report and Video

The full report is available for download –
[download full report]

Swiss Re have also done a three-minute Digital Distribution 101 video:
https://www.youtube.com/watch?v=tEdtbd07szQ

Additional reading:

1. Big bang digital disruption : http://www.the-digital-insurer.com/big-bang-digital-disruption-is-the-insurance-industry-in-asia-next/

Digital Underwriting & Fulfilment Using Point of Sales Tablet Toolkits

About the author

Hugh Terry is the editor of The Digital Insurer and a Director of Insight Consulting. Hugh has more than 20 years' experience in the insurance industry including operational, consulting and entrepreneurial roles. He is an actuary by profession and lives in Singapore. He is passionate about the application of technology to insurance business models and as well as writing articles he actively shares his experience via consulting assignments, speaking opportunities and participation in entrepreneurial initiatives in the field of digital insurance .

In this article Hugh Terry, the founder of The Digital Insurer, explores the use of point of sales tablet toolkits in transforming the sale of insurance.

A wander down memory lane

Up until the early 1980s the typical life insurance advisor's toolkit was a product brochure, a premium rate booklet and perhaps a specimen copy of the policy terms and conditions.

The widespread adoption of PCs combined with the need to produce more sophisticated illustrations, to support investment linked products and increasing regulatory requirements for information disclosure, led to the development of PC-based quotation tools. Since then improvements to pre-sales tools have been around the areas of needs analysis and some forays into electronic proposal submission – with mixed results.

What's changed with the tablet?

The introduction of the tablet device in January 2010 (the launch of the first iPad) represents a huge opportunity for insurers to redefine their sales processes. This article will outline in some detail what those opportunities are and what the potential benefits are but let's start by taking a look at what's different about the tablet from the PC:

Tablet addicts – across the generations

- Humans love them: I know from personal experience if you give a child a tablet device that within seconds they are up and running and engaged. The look and feel of both hardware and software is the work of genius – and has made these tools accessible to all with minimum effort. The product is extremely complex but the user experience is simple. A child can use an iPad with no training.
- They are perfect for a 1-1 sales experience: The portable nature of the tablet, the size, the connectivity when combined with such high levels of user acceptance provides the perfect platform for a point of sales toolkit for insurance advisors.

So what makes a good tablet-based point of sales toolkit?

The table below highlights key functionality our clients typically want to deploy in the first one or two versions of a tablet solution

Functional Area	Business Requirement
Quotation	• Quotation inputs • 'Reverse' calculations to calculate premium from given needs • Graphical and interactive outputs allowing what-if analysis to refine to meet customer requirements • Statutory outputs • Conversion to proposal • Quote review and signing
Proposal	• Auto capture of quotation information • Dynamic proposal capture (varies by product) including sections with traffic lights indicating completeness • Photo and ID capture • Agent reporting (when applicable) • Proposal signing (and signing readiness)

Functional Area	Business Requirement
Needs analysis	• Capture of statutory fact find information • Investment risk profiling • Needs tools for main areas of need (retirement, protection, education, general savings)
Resource Centre	• Folders of documents (sales presentations, brochures, fund fact sheets, etc.) • Available 'on demand' within Digital Advisor Tablet • Email, print and viewing capability. System records when these actions are performed with a customer (compliance)

What are the key success factors for a tablet toolkit?

There are two important success factors – usability combined with a good implementation strategy. Implementation is considered in more detail at the end of the article so let's take a close look at usability.

The first version of your Digital Advisor Tablet (DAT) should focus exclusively on Advisor acceptance – and this means that the focus should be on making it easier and more effective to sell.

And because selling is psychological the DAT needs to have usability, or 'WOW' factor, with both the Advisors and the end customers.

Some key usability factors that should be included are:

- Word-class interface design (pay for a specialist in tablet design and iterate the design until it meets requirements)
- Interactive graphical components for illustrations
- Time-saving items such as photo capture of identification and other documents
- Customisation options for illustration outputs and proposal inputs – allow the advisor to personalise for their clients
- Automation of transfer of quote information to the proposal

When the usability factors have been identified it is important to communicate with advisors and get them excited and engaged. If your DAT development is seen as just another piece of technology with low engagement of end users then do not be surprised if the initiative fails. 'Average' is not acceptable for a tablet-based sales tool.

Usability is about making simplicity from complexity. This is always a challenge for insurance sales which are inherently complex – but significant benefits in terms of adoption and improved sales accrue to the companies that take the effort and put in the hard work to make their tablet device work. It requires an iterative and participative approach to the design between graphics specialists and business users to ensure that 'function' and 'form' are creatively integrated.

What are the opportunities for transforming underwriting and sales fulfilment with tablet toolkits?

A digital proposal application process required a mindshift away from a structured two-dimension paper-based form. Suddenly, instead of designing an operationally efficient standardised application process there is an opportunity to transform.

There are four broad immediate opportunities to improve the underwriting and proposal submission process on a tablet toolkit:

1. Optimise entry, data transfer and output: a digital proposal can be split into these three components and each of them can be separately optimised and made fit for 'purpose'.
2. Make the input engaging: gamification techniques can be deployed to make proposal entry less of a burden. Dynamic response to information already captured allows information capture to be optimised. Obvious examples are to exclude questions specific to female lives for male applicants and to avoid repetition of medical questions when the life assured is also the policyholder's (as is the case in most applications). More imaginative proposal completion processes can extend to providing information to applications on their proposal – for example information on their BMI as well as videos.
3. Collapse the underwriting process: a combination of workflow automation and integration to rules based underwriting engines can allow an advisor to know instantaneously the next steps in the underwriting process and to advise the customer accordingly. This can extend to instant confirmation for clean non-medical cases as well as completion of supplementary questionnaires where prior responses indicate more information will be needed.
4. Coach the advisor: learning modules can be integrated into the table toolkit to provide 'on demand' tuition and guidance on application and selling processes. It is also possible to enforce checklists to make sure the correct data is submitted along with the proposal data.

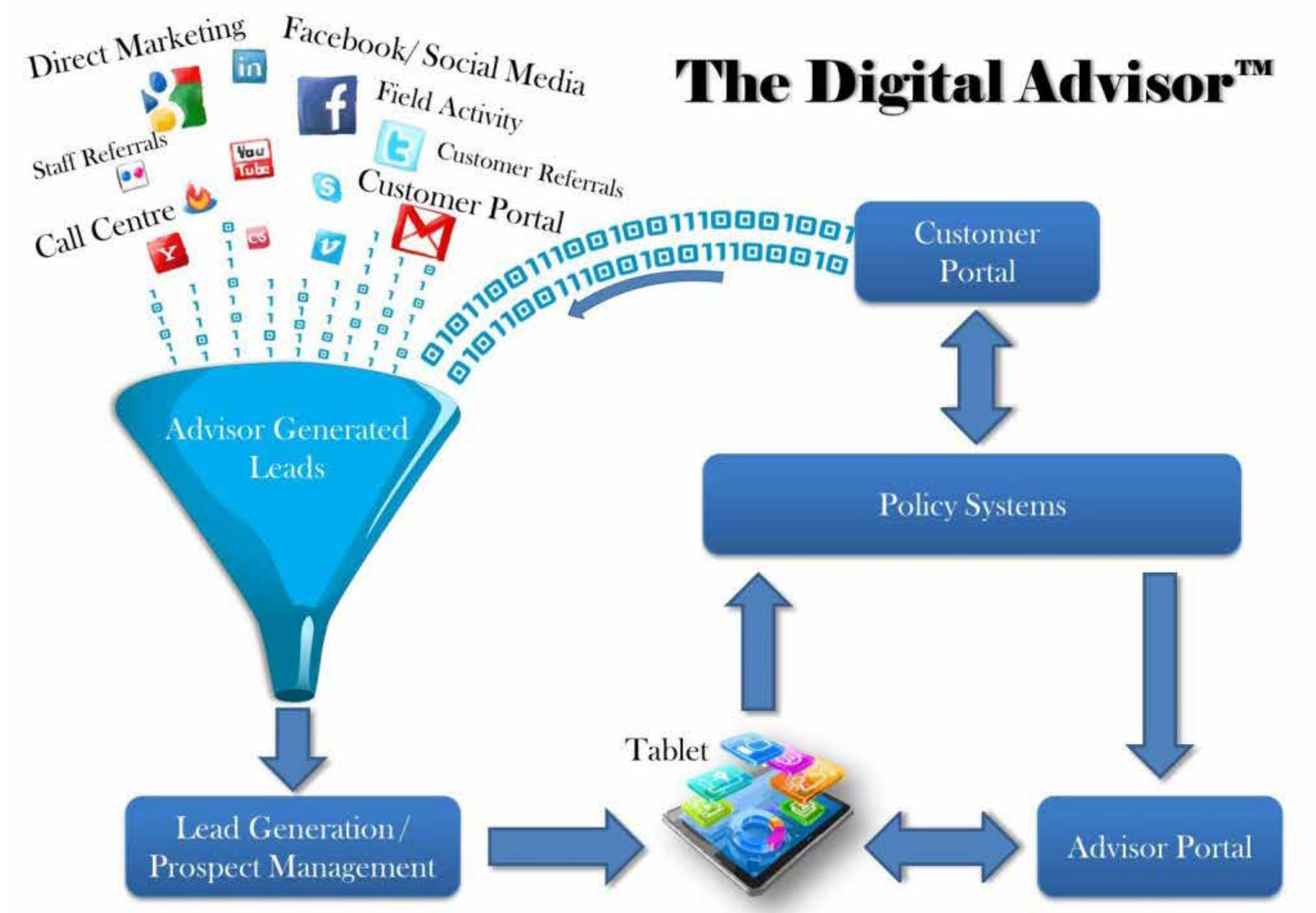
Making the business case

The business case for a Digital Advisor Tablet should centre on increased sales effectiveness – namely improving sales closing rates. The increase in sales closing rates should come from three areas:

1. Deployment of better sales tools than are currently available – specifically making it easier to close customer sales via the interactive illustration capabilities
2. Standardisation of sales process that makes training easier (and monitoring success easier)
3. Lower drop-out rates as the proposal can be completed at the time of closing on the quote (instead of often having to re-print and re-sign the final quote that the customer settles on)

With successful achievement of the first business benefit, increase sales effectiveness, it will be possible to upgrade the tool to gain substantial additional benefits in terms of:

- Paperless processing of applications (faster and more accurate)
- Increased and easier compliance (with tracking and recording of sub processes)



- Opportunities for increased automation of the underwriting processes (fast track processing, sending out emails with medical requirements immediately)
- Automated underwriting incorporating decision engines and experience bases that leverage reinsurers and insurers' knowledge
- The Business Intelligence captured (more information on the entire pre-sales process is captured and can be deployed to improve the sales experience further as well as make preferential cross sell and upsell offers)

Implementation Challenges

As ever it is one thing to know what you want from your DAT and another to implement successfully. For leadership teams at the start of their tablet journey we would like to focus on two key implementation success factors:

1. Implement in the context of an overall plan

Ideally your organisation should have an agreed strategy and roadmap before embarking on the development of tablet devices. The Digital Advisor business model example below, used by Insight Consulting's digital insurance practice, is an example of such a framework.

2. Deploy rapidly

Rapid deployment allows organisations to prove the tablet works and to get feedback, buy in and support from the wider organisation. Key decisions to take to achieve this include avoiding integration with other systems if at all possible, only build an online version (not an offline one), limit scope (for example do not include needs analysis in the first version), use rapid application development approaches and use a pilot based roll-out. By following this approach you should be able to deploy your first version in six to nine months instead of the two years needed for most new technology deployments.

Good luck with your point of sales tablet toolkit development initiatives. A successful deployment will put your organisation on track to meet the needs of the Digital Advisor – and their customers.

Want to know more about tablet point of sales toolkits?

Click the link below for The Digital Insurers comprehensive magazine with nine articles exploring tablet toolkits for insurance in more detail

http://www.the-digital-insurer.com/digital-insurance-digital-advisor-tablets/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At Swiss Re, it's our business to enable risk-taking. Why? Because that's how progress happens. That's how societies become better, safer, and more resilient. And that's why we believe in forging equally resilient partnerships with our clients. Because when we work together, share our ideas, and open our minds to the risks facing both today's communities and future generations, that's when we can identify not just the risks that are out there – but the opportunities too. Not just for you, not just for us, but for everyone. We're smarter together.
swissre.com/tdi3

The Great Indian Digital Renaissance:

Exploring the next big boom in insurance

“The digital revolution is far more significant than the invention of writing or even of printing.”

Douglas Engelbart

Authors

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Shreya Rawlley

Shreya is an International Graduate Trainee working under Risk Management for Swiss Re.
She studied Economics (Hons) at Delhi University’s Stephen’s College and is passionate about all kinds of economic/financial/social research. She has worked on diverse topics in the firm including Innovation, Big Data Analytics and Operational Risk Management amongst others.

The World is shifting from analogue to digital

Many writers are touting the ‘Digital Revolution’ as the ‘Third Industrial Revolution’, while it is generally accepted as the ‘Age of Information’. There are few examples of this revolution as striking as those of Britannica and Kodak. Few would have imagined that established industries, one of them 250 years old, would be wiped out within a few years, as happened with printed encyclopaedias in the case of Britannica, and film cameras in the case of Kodak. More recently, the digital start-up Uber disrupted traditional taxi models to such an extent that countries such as Germany decided to ban it, in order to protect local industry.

‘Digital’– the umbrella term for the six pillars – web, mobile, social media, big data, cloud and internet – is not only restricted to a few industries, but is changing the world as we know it.

It has been claimed that 90% of all data in the world has been generated in the last two years.[1] Moreover, digital technology is changing consumer behaviour patterns, a dynamic that firms across the globe are responding to in an attempt to gain first-mover advantage. The consequences of today's digital revolution are manifold: it has lowered barriers to entry in some industries, and facilitated the rise of digital attackers, like Google. With digital technology, physical presence is no longer a pre-requisite for success. Digital technology helps firms cut costs and innovate. The foundation of some of today's most innovative companies, such as Netflix and Zipdial, are their digitally disruptive models.

Endless digital possibilities in insurance promise an exciting future

If one looks at the insurance industry in the light of its digital possibilities, things start to become even more exciting…

Can it be that Google Glass will change the way insurance is provided? In future, will life insurance underwriting be done through wearable health tracking devices instead of conventional medical tests? In future, could mobile wallets or cash-on-delivery options disrupt the current payments model? The possibilities are endless and the insurance industry is rapidly trying to reinvent itself in this new Digital Age.

India finds itself in the midst of the Digital Age

Recently, Google used India as a launch-pad for its Android One operations. The country also provides the largest market for the technology giant WhatsApp, and the second largest for Facebook.[2] Among various others, these statistics clearly indicate that the country is standing at the centre of the global digital revolution. Of the 2.7 billion internet users globally, around 200 million (7.4%) are in India. Further, there are approximately 900 million mobile phone handsets in India.[3] The value of India's e-commerce sector was USD 16 billion in 2013, up 88% from 2012, according to Assocham, and it is forecast to increase by 250% by 2023.[4] India's potential internet user base is the third largest in the world. However, penetration is just 16-17%, well below the global average of 44% (forecast for the end of 2014), so there is huge potential for catch-up.[5] Digital innovation is not only restricted to the corporate sector, but it is touching all aspects of life. For example, during the 2014 national elections, Google introduced its Elections Portal, allowing India's voters to view the profiles of political candidates.

Market size: Digital insurance in India

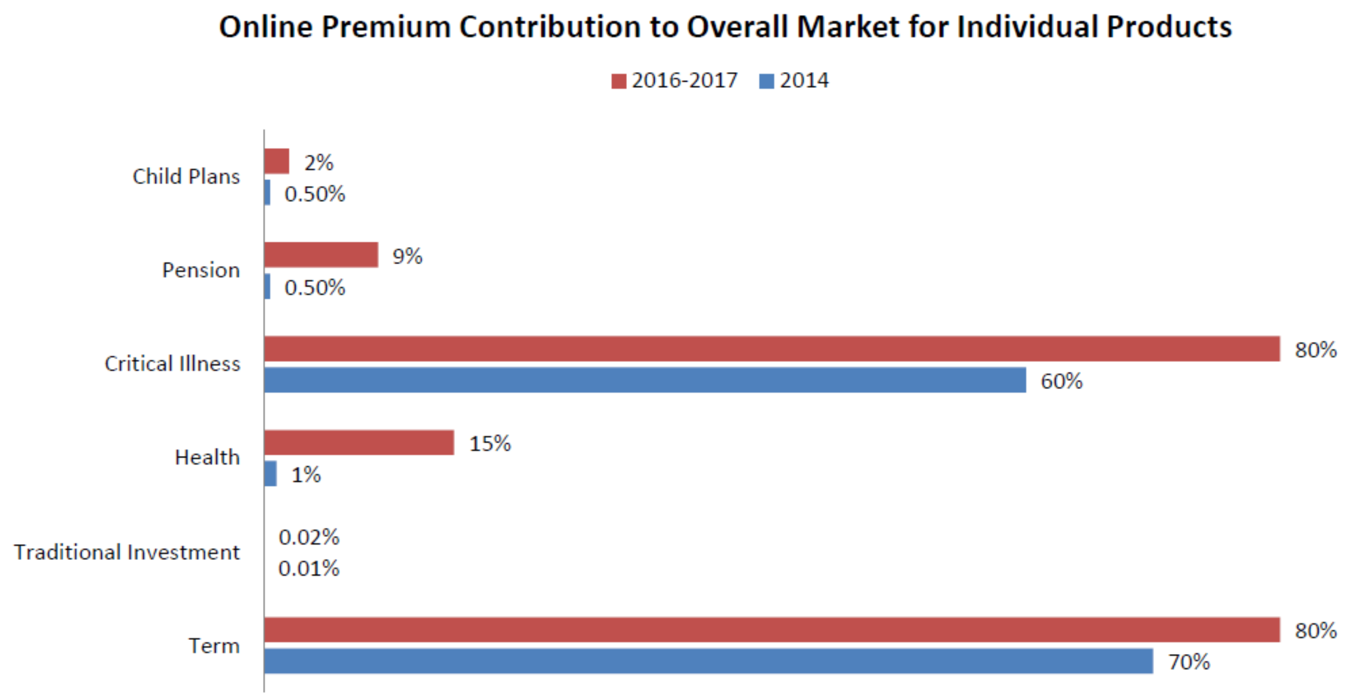
Online life and non-life insurance sales in India currently contribute around 1.5-2.5% of total premiums.[6] In volume terms, the total number of life and non-life policies sold online in India has grown by 200% in the past two years, and the growth rate is expected to remain in triple digits in the near future. Each month, there are almost 13 million online searches related to insurance, retirement and pensions.[7] In absolute terms, around one million insurance policies (life and non-life combined) are sold online in India.[8]

Apart from actual policy sales, the internet plays an integral part in influencing insurance sales, and this indirect influence is expected to increase significantly in coming years.

Online product profile: Present

It was noted that on aggregator websites, of all quotation requests, 75% are for Life and Health products (L&H) (55% for Life and 20% for Health), 20% are for Motor and 10% for other products. In terms of actual sales, 66.5% are L&H products and approximately 25% are Motor products.[9]

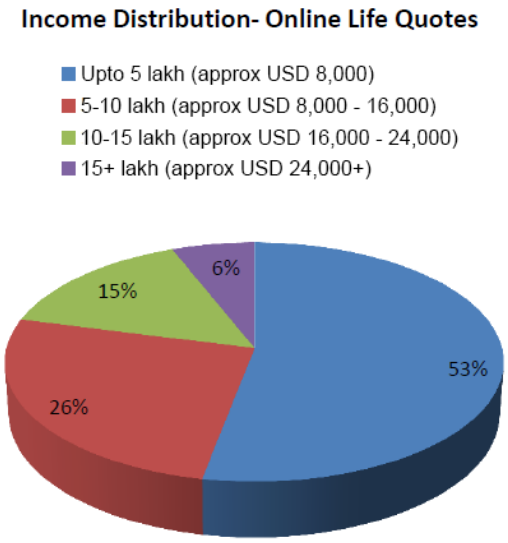
Data from Policybazaar, as shown in the following figure, suggests that some products will gain popularity in the next two to three years, some will remain predominantly offline products, and that others will transition from being predominantly offline products to online products.

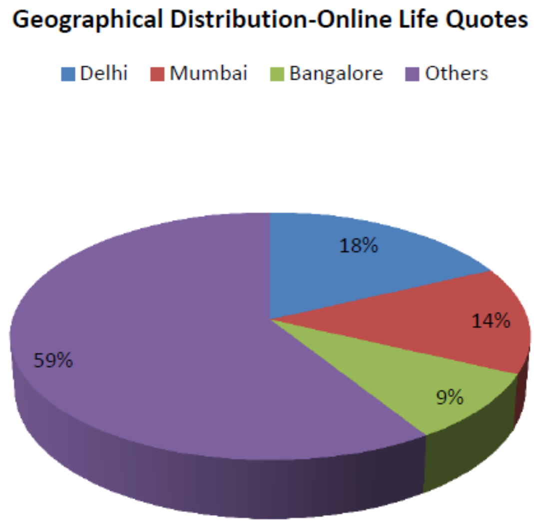


Source : Policybazaar

Online product profile: Future projections

In India, Term and Critical Illness policies are mostly considered online products, with 70% and 60% of sales for these products occurring online respectively. This is because they are standardised products for which a simple online underwriting procedure can be developed. The levels of online sales for Term and Critical Illness products are both expected to increase to 80% by 2016-17. However, traditional investment products like Unit Linked Insurance Plans (ULIPs), which are complex and demand higher premiums, are mostly sold offline. ULIPs currently make up close to three-quarters of India's entire insurance market. Currently, only 0.01-0.02% of investment products are sold online. This will probably remain the case, even though all the major insurers have plans to standardise some investment products in order to offer them online. Additionally, it is estimated that close to 7-10% of sales of pension plans will be online by 2016-17, up from less than 1% currently; also, 2% of child plans are expected to be sold online.





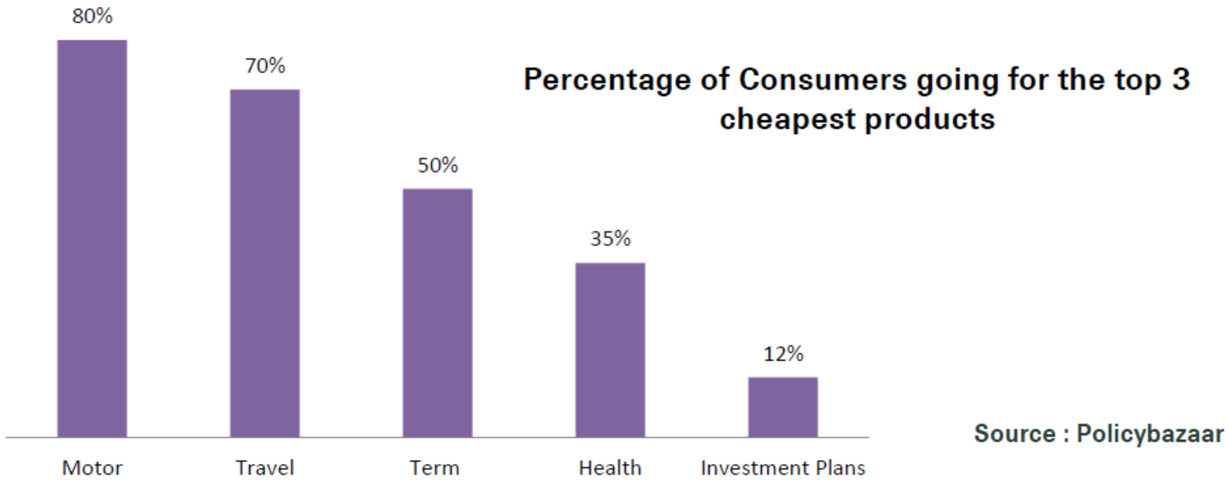
Source : Policybazaar

Customer profile

Some of the key insights gathered from the survey with Policybazaar regarding online consumer behaviour are as follows:

- 59% of the online insurance demand comes collectively from regions other than metros
- The middle classes are buying more online insurance than the rich and affluent
- The Indian online insurance market is price sensitive

Percentage of consumers going for the three top cheapest products



Digital sophistication of Indian insurers: Case study and interviews

From 2012 to 2014: A win-win for both consumers and insurers

Our case study with insurers showed that only 50% of life insurers in India are as yet leveraging the online space. Out of these 12 insurers, we conducted a survey with five life insurers and the results were as follows:

- The conversion rate of website visits to quotation requests averages 6.7%, with a maximum of 8.7%
    - The conversion rate of website visits into actual policy sales is expected to be lower
- The industry average of total policies sold online is 11%
- Online renewals are low for most insurers
- The average budget allocated to digital initiatives is 30% of the total marketing/branding budget
- The industry still has a long way to go – none of the insurers surveyed have a mobile app to sell policies, nor do they use Big Data analytics. Most insurers still do not provide a system for online settlement of claims[10]

> *"We are highly optimistic about the online insurance demand for 2020, and digital is a big priority. We expect mass-selling and simplification of products, keeping in mind robust demand from Tier 2 cities."*
>
> Indian Life Insurer 1

> *"Our focus will be to have the lion's share of the markets catering to the rural consumers. By 2020, online sales should contribute about 40-50% of the company's top line."*
>
> Indian Life Insurer 2

After comparing data between 2012 and 2014, we arrived at the following conclusions regarding the usage of online insurance in India:[11]

1. The average online insurance buyer has become marginally younger

The average buyer of health insurance online in India is younger today than he/she was two years ago, while the average age of the buyer of life insurance has remained much the same. Insurers should therefore make more effort to target the younger market.

2. Considerable improvements in the area of female insurance

In 2012, only 4% of the demand for online term products was from females. Today that share is 40%. Since females constitute a growing subsection of the consumer basket, more effort can be directed towards them.

3. Consumers are requesting quotes for higher cover than before, and for a higher number of policy periods

The rewards (or bangs for bucks) are greater for investments in digital. Returns in terms of new consumers gained and more policy premiums for a 100 INR investment in digital are greater than they were two years ago, and they are increasing at a very fast rate.

4. Demand from smaller towns has increased

Until the first half of 2011, most insurance policies were bought by people in metros and Tier 1 cities. However, according to Policybazaar data, today around 39% of the traffic is from outside of the top eight metros in India. There has been a significant rise in the interest and demand from customers in mid-level towns, like Jaipur, Indore, Surat and Lucknow.

We also found that Indian insurers are unanimously excited about digital insurance because of the following benefits:

1. Expansion of consumer base to include previously non-existent segments

Buyers from smaller cities and females who did not fall under the insurance umbrella previously have started searching for and demanding insurance products.

2. Tremendous cost advantages to the firm

Administrative costs for insurance companies reduce by 15-20% when selling Life products online, and 20-30% when selling non-Life products online.[12]

3. Digital leaders outperform peers in financial KPIs

Digitally sophisticated companies perform nine percentage points better than the average company in their industry in terms of revenue generation. These companies were also achieving 12 percentage points higher market valuation.[13]

4. Online loss ratios are lower

A few Indian Life and Health insurers reported that online loss ratios are better than offline loss ratios.[14]

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1) IBM Data Analytics
2) Business Standard, http://www.business-standard.com/article/international/india -becomes-largest-market-for-whatsapp-114042400278_1.html, IBM Times, http://www.ibtimes.co.in/india-facebooks-second-largest-market-says-coo-sheryl-sandberg-603620
3) Morgan Stanley, India Telecom Sector Report 2014
4) Assocham Paper, "Online Shopping—Review & Outlook in 2013"
5) Internet and Mobile Association of India (IMAI) and IMRB, United Nations International Telecommunications Unit
6) Swiss Re Survey with Policybazaar, 2014
7) *International Journal of Engineering Research and Applications (IJERA)*, Online Insurance in India: A Long Way to Go (2014)
8) Swiss Re Survey with Policybazaar, 2014
9) Swiss Re Survey with Policybazaar, 2014
10) Swiss Re Survey ER&C for Insurers, 2014
11) Swiss Re Survey with Policybazaar 2014, Insuring India Report 2012
12) BCG-Google Report, Digital Insurance 2020
13) Capgemini Consulting, The Digital Advantage
14) Swiss Re ER&C Survey with Insurers, 2014

Article Reviews

Using Location Intelligence and Cloud Computing to Drive Underwriting Excellence – A Pitney Bowes White Paper

Together with accurately pricing business risk, it's also essential for insurers to manage risk concentration. The Pitney Bowes business insight white paper showcases location intelligence applications running on new cloud computing environments and provides a transition roadmap for better productivity and greater competitive advantage.

The paper outlines four business processes for location intelligence:

1. Address standardisation
2. Geocoding
3. Risk profiling
4. Underwriting determination

It also examines the key business benefits of location intelligence:

1. Profitable growth
2. Operational efficiency
3. Underwriting effectiveness
4. Employee and channel productivity.

Link to source: http://www.pbinsight.com/files/resource-library/resource-files/saas_underwriting_wp_1011.pdf

Integrating the Value of Data in the Underwriting Process – An IBM White Paper

The IBM white paper discusses a series of case studies highlighting the changing role of underwriting and how big data and analytics will be at the forefront of this transformation. The case studies present a high-level perspective on some of the key challenges insurers are faced with when it comes to integrating data into the underwriting process:

1. Managing the collection of data
2. Integrating data insights into the underwriting process
3. Data innovation in the underwriting process
4. Funding and underwriting improvements

Link to source: http://www-935.ibm.com/services/multimedia/Integrating_the_value_of_data_in_the_underwrtiting_process_Mars_2013.pdf

Article Reviews

Reinventing the Underwriting: What's now possible in a Big Data world – An Opera Solutions White Paper

Underwriting risk assessment is data intensive and the time is ripe for integration of real time big data into the underwriting process. Big data can be incorporated into the underwriting process in numerous ways. In this white paper, Opera Solutions have charted the new paradigm for underwriting in a 'Big Data' world and have explained what insurers can and should do to bring it to the fore. The white paper highlights that the underwriting paradigm needs to shift from static to dynamic and this requires the following key changes:

1. Adopting powerful new analytics approaches that allow more rapid and nimble changes, along with deeper insights into borrower and portfolio behaviour
2. Utilising more data, more effectively
3. Designing products more suited to dynamic credit situations
4. Combining machine IQ with human insight and intelligence
5. Addressing regulatory needs

Link to source: http://www.operasolutions.com/wp-content/uploads/2013/01/Opera-Underwriting-White-Paper.pdf

The Future of Underwriting – E&Y report

In the thought leadership paper 'The future of underwriting – A transformation driven by talent and technology', E&Y's GailMcGiffin presents a vision of the future of underwriting and describes the role that underwriters will play in the coming years. The paper highlights some of the transformative technologies and talents that insurers will need to thrive in tomorrow's highly dynamic and competitive marketplace. In the report, Gail McGiffin considers how the role of underwriters will change and concludes that future underwriters will need to be masters of many trades and will have to acquire new skills and capabilities that will broaden their role to that of:

- Sales executive
- Decision scientist
- Customer advocate
- Innovator

As insurers think about the future of their business and the role of underwriting, cultivating the right talent will be as important as deploying the right tool sets.

Link to source: http://www.ey.com/Publication/vwLUAssets/EY-the-future-of-underwriting/$FILE/EY-the-future-of-underwriting.pdf

Article Reviews

Strategic Considerations for Automated Underwriting
– A RGA White Paper by Paul O'Keefe

By investing in technology and skills, insurers can derive quantifiable benefits by automating their end-to-end underwriting processes. In the white paper 'Strategic Considerations for Automated Underwriting', Paul O'Keefe from AURA analytics outlines the key factors that insurers should consider, and the questions they must answer, when making automated underwriting a part of their strategic plan. As outlined in the white paper, the key questions that should be asked and answered regarding a company's need and general readiness for e-underwriting include:

- Will it support our business?
- Is it a viable option at this point in time?
- What are our pressing needs (e.g. resource relief, sustainable growth)?
- If growth is a consideration, in which markets do we wish to grow?
- What happens if we do not move toward automation?
- What kind of process or system makes sense?
- How would it fit into our overall future plans?
- Do we have the right resources to support this effort?
- How do we get started?

Link to source: http://www.rgare.com/knowledgecenter/Documents/AURA_Whitepaper_0114.pdf

Practical Innovation for Claims and Underwriting
– A Presentation by Dr Michael Neary

New and potentially disruptive technologies are impacting the insurance sector. In this presentation, Dr Michael Neary looks at the following technologies and considers how they could be used innovatively within the claims and underwriting functions of insurers:

1. Social Media
2. Cloud Computing
3. Video
4. Mobility
5. Voice

Link to source: http://www.aluca.com/images/Functions/2011/Miniluca%202011%20Michael%20Neary.pdf

Article Reviews

Advanced Analytics and the Art of Underwriting – A Deloitte Report

The use of data mining and predictive modelling has forever changed the underwriting process. This Deloitte report proposes the way insurers can integrate data mining and predictive modelling into the underwriting process that will act as the differentiator in the new paradigm and ensure underwriting profitability in the coming years.

Link to source: http://www.deloitte.com/assets/Dcom-Australia/Local%20Assets/Documents/Deloitte_FSI_AdvancedAnalytics.pdf

Improving Insurer Performance with Predictive Analytics – A Report by Chris Stehno from Deloitte Consulting

The application of predictive analytics in insurance is becoming increasingly widespread as insurers now realise its impact on business growth, risk administration and loss control. In this report, Chris Stehno of Deloitte Consulting presents a high level perspective on the predictive analytics role in improving life and long-term care insurers' performance using greater insight from traditional underwriting data. The report also highlights how innovative analytics can drive value through effective and efficient risk assessment and underwriting control. As highlighted in the report, the implementation of a predictive model can result in the following potential benefits to the underwriting process:

1. A reduction in time to issue a policy
2. A reduction in underwriting costs
3. Incorporation of independent view of lifestyle data into the underwriting process
4. Higher placement rates due to quicker response time to applicants
5. Assessment of current blocks of business
6. Review of current underwriting practices

Link to source: http://www.lifecareassurance.com/2010conference/powerpoint/17.pdf

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