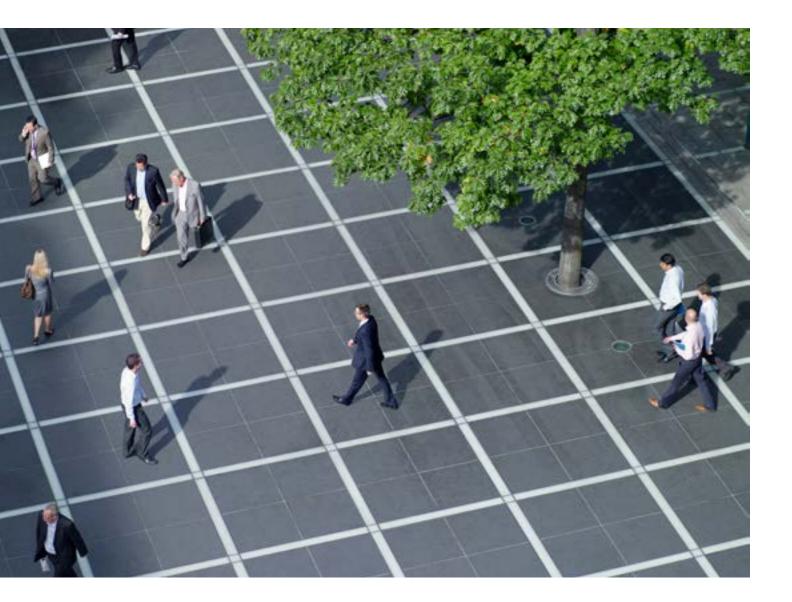


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# **Evolving considerations for the Indian Insurance Industry**





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# Foreword

India's insurance sector is undergoing unprecedented modernization – it is digitising rapidly, adopting modern techniques to tackle fraud, and exploring new avenues for risk management, customer engagement, operating models, investment and distribution.

The new-age customer is demanding simpler terms, transparent underwriting, easily comprehensible benefit structures and minimal human interaction. Product innovation is no longer regarded as an exercise for producing a complicated and intricate product, but an effort to simplify and connect to the customer in a hyper personalized manner like never before. Instead of all risk products, people are demanding simple one risk cover products which are easy to understand and therefore allows customers to choose discrete individualized need based covers. The language of the policies need to be simplified to keep pace with the expected customer centricity.

Penetration of insurance being low is not a new fact. The GDP is growing at a fast pace and the rate of penetration has to increase at a faster pace to reach the desired levels. Several distribution channel level innovations have been introduced by the regulator to help the industry reach out to a larger population. However, proliferation of distribution is not matched with the product simplification necessary to make it easy to sell and service.

The government is actively driving digitisation through India Stack, direct benefit transfers and other initiatives under the Digital India umbrella. Given the unprecedented increase of smart phone proportion and ease of internet access through the competition of network providers, insurance companies will need to strategically adopt the technological infrastructure required to launch products that meet customer needs. The customer access across the vast geography of India so far has come at a great cost and involved investment of large amounts of capital. That is going to change dramatically now. Leveraging low cost digital distribution channels for sales and service could play a significant role in helping insurance companies deepen market penetration.

While digitising, insurance companies must be wary of, and take measures to tackle, the risk of new modes of fraud which will inevitably accompany it. Digitization is leading to an explosion of data and digital footprints; these can be tracked using Big Data analytics and artificial intelligence to not just investigate, but also prevent fraudulent activities. Machine vision, which allows computers to extract meaning from images, predictive analytics, which can be used to flag off suspicious events, and identifying and unearthing cartels and fraud rings are all going to be key applications in the fraud management experts' armoury. The expertise for bringing higher levels of integrated digitised solutions will have to blend with the disruptive potential of Insurtechs. PwC Surveys shows that while 74% of all Insurance companies globally believed that Insurtechs will disrupt Insurance business, Today InsurTech is becoming more widely understood and accepted. Gaining a better understanding of InsurTech has

led the majority of respondents (56%) to estimate between 1% and 20% of revenues being at risk in 2017. The vision has become sharper and more companies are trying to align with them and create synergies.

The prominence of investments on an insurance company's balance sheet and the impact of investment returns on its profitability make efficient investment management crucial. Companies must adapt to the changing nature of products, risks and regulatory frameworks, explore modern investment choices and question traditional ones. For instance, it is worth considering whether the traditional emphasis on liquidity, which has a large opportunity cost, should be replaced by investments in alternative asset classes to drive higher returns. Within IRDAI's prescriptive regulatory framework, insurers must be dexterous in identifying appropriate assets and asset allocation strategies, with a focus on dynamic asset liability management and portfolio optimisation techniques. The newer instruments and techniques will bring in their wake newer challenges and risks, and the regulator will no doubt need to weigh in the benefits vis-à-vis the risks to the industry. However, if the industry has to move forward and offer better products as well as produce risk-hedged returns, newer horizons have to be explored with expert help.

The insurance sector needs to quickly understand these trends, expedite digitisation of processes, leverage data and technology to prevent digital fraud and make efficient investments to mitigate risks and stay one step ahead of the competition.

The Confederation of India Industries (CII) and PwC are delighted to present, in these papers, our views on these themes.



**Joydeep K Roy** Partner and Leader Insurance and Allied Services



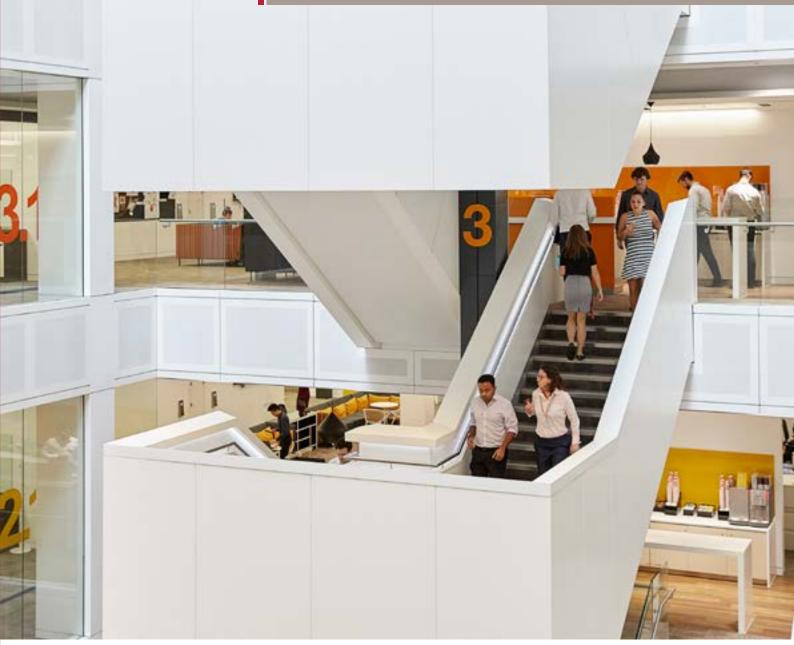
**Chandrajit Banerjee** Director General Confederation of Indian Industry

# Deepening Penetration: Simple Products and Low Cost Distribution



# 1. Introduction

As a society, penetration of insurance in India has been low, compared to other parts of the world.<sup>1</sup> In the past decade, penetration of insurance in society has grown from 3.17%<sup>2</sup> (in 2004) to x 3.4% currently.<sup>3</sup> A large population, rising incomes and rapid urbanisation are creating an environment that is conducive for insurance. The insurance industry is fast adopting digital technologies that are expected to give a push to market penetration of insurance products and their efficient process management throughout their lifecycles. This report will delve into the changing landscape in the insurance industry and how digital technologies can help this industry's growth trajectory in its penetration and product innovation initiatives.



<sup>1</sup> Source: IRDAI Annual Report 2015 <sup>2</sup> Source: IRDAI Annual Report 2015

# 2. The Current Scenario in the Insurance Market



Three in four players (74%) acknowledge ongoing disruption

Figure 1 PwC Survey: Opportunities await: How Insur Tech is reshaping insurance, 2016

For the common man, insurance represents a complex world of legal conditions, obscure claim processes and even more opaque payout structures. This often leads to chaos and a general distrust in buying an insurance product. For companies, the cost of administration of these products is high beyond the initial years. This is driven by rapid changes in the technology landscape as they constantly try to stay up to date. Therefore, insurance companies often have multiple legacy systems on which these products are maintained, making the process expensive and complex for them to administer older products .

Furthermore, insurance companies are also plagued by cost pressures, multiple Know Your Customer (KYC) requirements, complex claim processes, fraud detection mechanisms, storage of documents, lack of customer profiling and lack of credible customer information for efficient risk modelling. FinTech/InsurTech companies are addressing some of these challenges in their own way and going to market with their solutions. Some of these innovations are being snapped up by large insurance companies and are being integrated with their offerings. The Insurance Regulatory & Development Authority of India (IRDAI) has also helped by mandating certain policies, such as mandatory e-insurance accounts for all customers (IRDA) Regulation published on 13/06/2016, F.No. IRDAI/ Reg/ 16/ 128/2016). The Government also is doing its bit by pushing digital literacy, internet penetration and adopting financial innovations such as UPI and various schemes for cashless transactions.

Simplifying insurance products would be another step in this direction.

Insurance policies are complex, not just on one level, but at all layers of the industry. From product- and policy-related benefits to the pricing, inclusions and exclusions, the application process, the claims process and the legal standing, there are various hurdles along the way that have seldom been encountered in the Indian marketplace.

The perceived absence of a strong redressal mechanism also leads to people thinking of insurance as a complex financial instrument that does not offer instant gratification.

New entrants are disrupting the industry by adopting digital technologies such as telematics for auto insurance and simplified pricing models for health insurance. A number of digital insurance providers have evolved that focus on providing personalised experience and innovative insurance models to simplify insurance products for their customers.<sup>4,5</sup> The manner in which the Indian population is distributed makes it expensive for Indian insurers to operate brick-and-mortar shops across tier-II and tier-III cities, either directly or through distributors. Digital technologies will help them address this challenge by reaching out to their customers directly through self-service options. The customer experience of dealing with an insurance company through digital channels will however require not just implementation of technology, but also a carefully thought out user experience strategy. The 'Digital Natives' who will consume these services have unique needs at the individual level and designing a personalised experience for them will go a long way in addressing the complexities an insurance customer faces today.

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Almost a third of insurers do not deal with FinTech at all



Figure 2 - PwC Survey: Opportunities await: How InsurTech is reshaping insurance, 2016

<sup>4</sup> https://letstalkpayments.com/80-hottest-insurancetech-companies-shaking-up-the-trillion-dollar-insurance-industry/

<sup>5</sup> https://www.raconteur.net/business/insurtech-is-set-to-take-the-insurance-industry-by-storm

# 3. Need for Simplicity in Insurance Products

The Indian market has seen a significant trust deficit between the insurer and the distributor regarding seriousness and continuity, the distributor and the customer during a sale, and the customer and the insurer during the claim process.

This trust deficit is accentuated due to the perceived complexity of the products, which are seen as a barrier to understanding and utilising them when required.

### The areas that need simplification are as follows:

### 1. Policy benefits:

a. Currently insurers prefer to file and launch a few products and therefore tend to include several benefits in one product to stay ahead of competition. This leads to complexity in the products as well as difficulty in convincing customers, resulting in extension of the sales cycle.

### 2. Wording of policies:

a. The language of a policy document is akin to a legal contract, and therefore, either the customers do not expect to

understand it or they misunderstand it, both of which leads to a 'trust deficit' between the insurer and the customer.

### 4. Proposal form and application process:

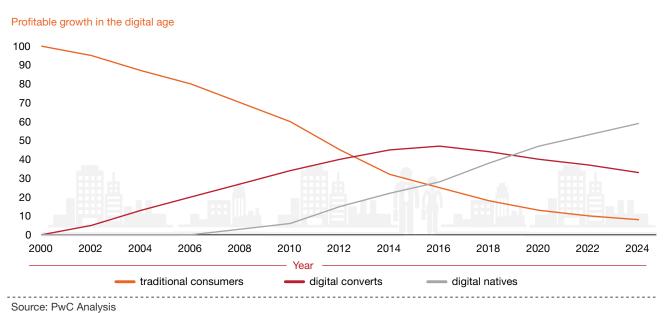
a. The simpler the form, the easier it is to reach out to all sections of the population. The complexity of the form emanates from the desire to capture the maximum information about a prospect, and therefore, enable ease in underwriting.

b. The application process, replete with its requirement for attachments, is a maze of transactions, which sometimes confounds customers.

### 5. The claim process:

a. Rarely does a customer understand the entire claim process while buying a product. The process involves compliance with the conditions of the policy and also supplying proof of an incident in all respects. In this case, complexity adds to the trust deficit.

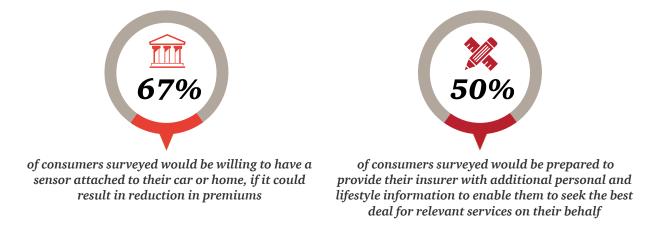
Today, the insurance marketplace is clearly demarcated by an aging population on one end and Digital Natives on the other. Digital Natives are characterised by their attention deficiency, impatience and expectation to get served 24x7 at any location through any device. They are used to receiving information really fast, and are constantly parallel processing and multi-tasking. They prefer graphics to text and like random access. They function well when networked. Reaching out to this market needs the implementation of new channels to reach to them and innovative strategies to engage them. Attracting their attention to traditional channels for dissemination of information, policy selling and claims processing is consequently a herculean task.



Increasing degrees of digital fitness are required to play and win!

Figure 3: Source: PwC Study - Insurance 2020: The Digital Prize - Taking Customer Connection to a New Level

Today, the world has 7.3 billion mobile phone connections and 3.5 billon internet users.<sup>6</sup> The ubiquitous presence of connected devices has opened up a new generation of Digital Natives, who can only be reached through technology



#### Figure 4 Source: PwC Survey, Insurance 2020: The Digital Prize - Taking Customer Connection to a New Level

This people in this generation are not afraid of sharing personal information through sensors (wearables and IoT devices) if this will benefit them by a reduction in insurance premiums. They are willing to experiment with insurance if it is easily accessible in their channel of choice, if it is simple to understand with a direct correlation between what they see and the benefits they get without sweating out too much on paperwork to buy, claim or pay for insurance.

Insurance companies are listening and many of them have started rolling out technology that can cater to these needs, since they realise that this 'connected' population needs insurance providers that can address them in their preferred channel —digital.

In the financial sector, microtransactions are picking up due to a reduction in transaction costs by using digital technology. Adoption speeds, measured by the time taken to attract and secure a million or billion users for any product that is being introduced, have reduced significantly in the past decade. As a result, technology-adoption rates are high and micro-transactions are becoming popular. For example, in India, 50% of mobile 'top ups' are 'chhota recharges' (of less than INR 60) with more than 66% being less than INR 100.

This demonstrates that financial businesses can emulate micro-

#### Customer servicing cost (USD)

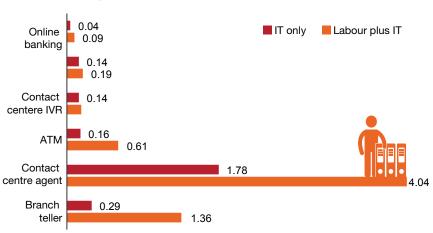


Figure 5 - Source: PwC: Emerging Markets, Driving the payments transformation, 2016

transactions, which can help penetration of their products and services in the market. Banks have shown the way by introducing internet banking and mobile banking, thereby reducing their cost of transaction. Internet banking and mobile banking cost less than 10% of a traditional inthe-bank transaction. This is a strong case for insurance companies to opt for digital distribution channels and introduce low-value insurance products that cover specific events.

Insurance companies can reduce

complexities in underwriting, distribution and servicing of their products by adopting digital technologies.

This could pave way for a 'One Need One Product' scenario, where customers are provided simplified products that cater to their specific needs, and their insurance benefits are clear, without any complex payout structures. These products will be dependent on microtransactions and drive volumes, and will necessitate a robust digital delivery and claim processing infrastructure.

<sup>6</sup> ITU Statistics on Global Mobile & Internet subscriptions 2016, http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

8 Evolving considerations for the Indian Insurance Industry

# 4. Defining Simplicity from the Perspective of Consumers



of consumers surveyed would be willing to download and use an app from their insurance provider

Figure 6 Source: PwC Study, Insurance 2020 & Beyond, Necessity is the mother of reinvention

Customers need simple products that can be accessed any time (to buy or claim) and have predictable outcomes.

The language and process needs to be simplified. Opting for a Home Insurance policy that protects the contents of one's home cannot be as complex as taking an All Risk policy for a factory that manufactures fragile products.

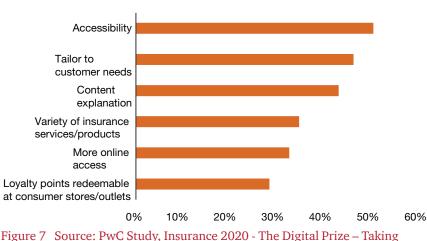
The simplification of the process will extend the reach of insurance providers, which are not deemed to be efficient sellers or are considered unfit to sell insurance today.

However, there is a paradox here. To make and sell products with fewer

questions and no exclusions, insurers need a lot more information about customers, which share voluntarily with candour and precision. This requires trust — and this is in short supply! Consequently, simplicity needs to be defined so that people are enthusiastic about and feel comfortable about the value of sharing their data with insurance providers.

Not only the traditional population residing in the remote corners of the country, but also the Digital Native generation that has recently entered the working population in urban areas and has the capability of participating in the insurance market, also demands an entirely new channel and strategy to communicate and engage with them. They are not comfortable with complex terms, and opaque underwriting and

What would help insurer improve customers' experiences ?



Customer Connection to a New Level

will lead to customer delight. The risks covered through this product would be well defined and terms of coverage conveyed to customers simply. In most traditional insurance products, insurers are always trying to reduce their payout through complex legal verbiage while customers try to maximise it through inaccurate or in some situations fraudulent claims. This atmosphere of mistrust can be addressed by a 'one need one product', which is well defined and both the parties know the outcomes clearly. Well-defined non-human touchpoints in the product lifecycle process (from distribution to claims) can drive penetration for an insurer. As an extension, an automated policy coverage and payout mechanism would enhance the customer experience further in such a situation.

## **One Need One Product**

Insurance products that address specific events will be able to address the needs of the Digital Natives. These products will cover one or two related risk events at low premiums and generally not have complex payout structures. Implementation of the 'One Need One Product' policy will benefit insurers as well as their customers. Insurers will have simplified underwriting and claims processing procedures, which п

benefit structures, and are looking for

simple products with clearly defined

payment- and payout-related terms.

companies to interact with them at the

they prefer. Consumers' preference for

face-to-face interactions is generally

companies will therefore have to be

tech-savvy to implement and use the

right infrastructure to offer products

that are simple to understand, easy to

distribute (often as personalised online

products), track and claim. Intuitive User

Experience designs for such interactions

would be a prime factor in wooing such

access to insurance policy-related details

at any time. Therefore, it is not feasible

to disseminate this information through

customers. Digital Natives want easy

traditional.

low in this segment. Insurance

times that they want and on the devices

Such customers expect insurance

# 5. Urbanisation of Rural consumers

Niti Aayog, in its report on Digital payments (January 2017) has proposed a slew of initiatives to push digital payments in the country. One of the goals set by the committee of Chief Ministers who participated in the deliberations is to increase the number of transactions from ~900 million (in October 2016) to 30 billion by December 2017. There is a push for rural adoption of digital technologies through proposals such as provision of free data, and adoption of technology for Regional Rural Banks, Scheduled Commercial Banks and Cooperative Banks.7 According to MEITY's statement in December 2016, rural adoption of e-wallets was over 70% and rural adoption of UPI was also fairly high (16%), primarily driven by demonetisation.<sup>8</sup> A report published by the Insurance Information Bureau revealed that the 'bottom' districts by way of penetration of insurance agents were at the same levels in CRISIL Inclusix. This proves that there is a direct correlation between banking inclusion and insurance penetration.9 Adoption rates of digital payments in

rural India indicates that the potential for disruption in the insurance industry by going digital is high. India offers a compelling opportunity for insurance companies to grow at over 17% year on year, with a forecast to reach USD 240 billion in next 10 years from a USD 60 billion market today.<sup>10</sup> This growth is projected to be driven by rapid adoption of digital technologies in rural India.

However, this will need a massive drive for simplification of products and processes, working in tandem with all other initiatives, to succeed.

Urbanisation is defined by the metrics of population density, the population engaged non-farm activities, and availability of infrastructure, education and health services. The definition varies largely across different countries.<sup>11</sup> In India, urbanisation is a combination of factors and is not just restricted to 'cities' or 'urban areas'. We see pockets with 'rural' characteristics (kaccha developments and lack of access to amenities traditionally defined as urban) and 'rural' areas with high-quality 'urban' infrastructure. For the purpose of this discussion, the relevant parameters for the insurance industry are therefore availability of digital infrastructure, education and health services in rural areas. With digital infrastructure being addressed by various government initiatives recently, education and health services have also been improving in quality and access in recent years.12 Financial literacy is one of the key drivers for penetration of insurance. The National Institute of Security's market report on financial literacy shows a clear gap between urban and rural levels of literacy and knowledge of insurance products in specific.13

<sup>&</sup>lt;sup>7</sup> http://niti.gov.in/writereaddata/files/new\_initiatives/Digi%20Report%20-%20FInal.pdf

<sup>&</sup>lt;sup>8</sup> https://www.themobileindian.com/news/e-wallets-quickly-attaining-high-adoption-rates-in-rural-india-miety-15868

<sup>&</sup>lt;sup>9</sup> https://www.crisilresearch.com/Pdf/CRISIL\_ASSOCHAM\_Insurance\_Report\_October\_2015.pdf

<sup>&</sup>lt;sup>10</sup>https://www.ibef.org/industry/insurance-sector-india.aspx

<sup>&</sup>lt;sup>11</sup>https://esa.un.org/unpd/wup/publications/files/wup2014-highlights.Pdf

<sup>&</sup>lt;sup>12</sup>www.planningcommission.nic.in/reports/sereport/ser/vision2025/urban.doc

<sup>&</sup>lt;sup>13</sup>http://www.ncfeindia.org/images/pdfs/nasional-surveyy/NISM\_Final%20Report%20-%20All%20India.pdf

# 6. Emerging Trends: Adoption of Digital Technology in Insurance

While many Indian insurers have adopted various digital technologies, primarily mobile-based touchpoints for their customers and distributors, the potential of digital technologies to significantly affect their operations and customers have not been explored yet. Moreover, due to the characteristics of the Digital Natives, one of the major issues any business is facing are their engagement metrics. Various means of engagement are being tried out in the form of mobile advertisements, marketing campaigns and push messages about products. However, a meaningful conversation with customers has not yet been initiated. Insurance products have even fewer touchpoints with customers, except for renewals and claims if required. In this scenario, insurance companies can leverage their tie-ups

with their distributors and explore other businesses to cross-sell opportunities, driven by a digital operational backbone. This can help to bring together insurers and other businesses to cover specific risks (One Need, One Product).

In the digital context, the customer acquires a complex digital identity. For organizations, understanding the identity and delivering customised outcomes becomes a priority. The organization has to continuously innovate and adapt to new business models. This can be often achieved with help from the larger eco-system by building a network of partnerships. Such partnerships are loosely coupled through digital channels and can enable growth of penetration for insurance companies. A PwC survey indicates that customers are willing to buy insurance policies from banks than from any other business. However, digital technologies will enable a low transaction cost platform on which other businesses will also be able to sell insurance products. Today, businesses entering the insurance distribution arena are varied and can range from post offices to internet retailers and social networks. However, we need to remember that digital developments are a means to an end with customers as a centrepiece rather than an end in themselves.

#### Which of the following companies would you be wiling to buy an insurance policy from?

Bank Branch High Street broker Internet search engine Major retail brands Healthcare provider Internet retailer Technology and internet provider Bank telemarketing Customer support websites and forums Mobile phone operator Social networks



#### 5% 10% 15% 20% 25% 30% 35% 40%



# 7. Conclusion

Insurance is issued under the principle of 'Utmost Faith', since there is an asymmetry in information. Customer know everything there is to know about their lives, health and assets, and insurers are expected to carry the risk with a fractional sum of money based on customers' declarations.

Therefore, a transaction starts with two parties who are wary of each other, knowing they have to trust each other, but reluctant to do so.

The trust deficit is further accentuated by the complexity introduced by insurers to address their side of the problem.

Therefore, the first step towards achieving increasing penetration has to be taken by insurers by simplifying their products and processes, and deconstructing benefits to effectively address customers' need for clarity.

Rural and urban customers alike would appreciate total clarity in enumeration of products' benefits, and use of normal language in place of legalese for in policy wording. Therefore, it is amply clear that application and claim processes need to be streamlined to achieve predictable outcomes.

Implementation and use of digital technologies have ushered in a new breed of customers who are tech-savvy, connected and informed and want insurance companies to deliver exactly they genuinely value rather more of the same that is being served today.

The fore-runners are looking beyond sensors and Big Data analyses as simple pricing tools. Their aim is to develop a new

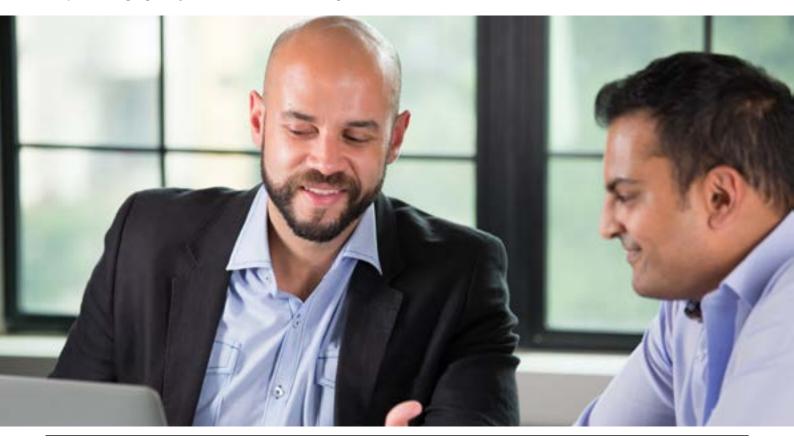
generation of information-based services through focused analyses and organisational collaboration, to understand unconnected data collated by these digital tools. They want to provide advice on high-margin proactive risk and its prevention. And by the time the followers catch up, the market will have moved on!

Analytics techniques available today can be great assets in the hands of practical insurers, since these can be utilised to accurately predict a population's propensity for claim-related fraud. Their use can lead to development of products that are simple, have little or no exclusions or caveats, and enable almost instantaneous payment of claims.

Some products can be associated with geo-tagging and proximity- based detection of

claim events. Most importantly, customers' trust can only be secured by seamless payment of claims.

Simplification of processes will also lead to some degree of uniformity in the expectations of customers in their interactions with multiple insurers. Today, almost everyone who goes to a bank knows what to expect while withdrawing money, clearing cheques and asking for account statements. A similar level of uniformity between products' benefits, language, terminology, integrity of process and claim handling is the holy grail of the insurance industry – waiting to exhale and claim its true great place in the global insurance community in terms of its penetration exceeding 6% of India's GDP in the near future.



# Digitisation and Fraud Management

# 1. Digitisation – the Possibilities

## 1.1. Changing Indian Consumers and their Digital Footprint

India is seeing fast-paced adoption of digitisation with a huge push from the Government accelerating it further. This situation, coupled with the pricing arbitrage, ease of access and transactions, and convenience is creating a formidable positioning for digitisation in consumers' minds. There are now more than 125 million active users of e-Commerce. The influence of digitisation can be noted from two overlapping perspectives - one, there are end-to-end digital transactions, where users become familiar with digital platforms, make buying decisions online and execute their purchases on this channel; second, in digitally influenced purchases, customers use digital channels to obtain information or make purchaserelated decisions, but use other traditional channels (stores, branches and agents) to make purchases. The size of this market is typically three to four times the size of digital purchases. It is estimated that around 30% of insurance-related purchase decisions are now influenced by the digital channel.

If we look at customers' lifecycles beyond acquisition, the digital mode has always been the key element in servicing customers and engagement strategies. However, with the evolving technological innovations and expectations shaped by eCommerce players, customers want their insurance solution providers to do more for them – provide them comprehensive information, seamlessly deliver multi-channel services, suggest ways in which they can progressively reduce their insurance-related expenses, nudge them with the right products at the right time, and finally, surprise them with innovative thinking time to time. Studies indicate that customers do not have a significant attachment to specific brands today. Therefore, a provider that is able to provide the right engagement solution will be able to retain its customers.

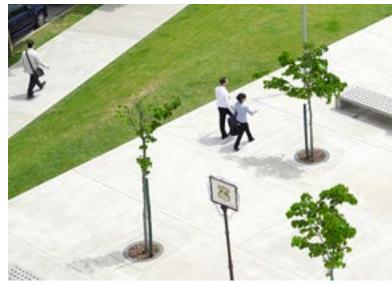
Insurtech start-up Lemonade had set a new benchmark for paying claims in three seconds with zero paperwork. In fact, throughout the industry, a wave of technologyenabled process automation is transforming every aspect of the business, from insurance quotes to underwriting, policy approvals to submission of claims, and more.

Digital channels are increasingly becoming critical throughout the lifecycle of customers or policies. It is imperative for insurers to leverage the huge amount of data generated as these new customers navigate the internet and leave footprints. Insurers have already started collecting data from customers' browsing patterns, the websites they visit, and from the partners where these customers typically research, and ultimately, make their buying decisions. Some insurers overlay this data with additional information from call centres, social channels, agents' notes and their preferences. This data has significant application in 'right profiling', identification of 'best fit' products, offering tailor-made propositions or pricing as well as in understanding the transaction-related behaviour of customers.

However, this increased availability and application of data is very susceptible to fraud. Therefore, insurers must have clearly articulated strategies in place to detect and combat fraud. And in view of the huge number of cyber incidents taking place today, this needs to be an ongoing effort rather than a periodic exercise. The volume, velocity and variety of information in a highly mobile environment have created hazardous scenario and created an urgent need for analytics for insurers to gain better insights. According to the Global Fraud Study 2016 conducted by the Association of Certified Fraud Examiners (ACFE), victim organisations that lacked antifraud controls suffered high median losses.

Incidences of insurance fraud have grown significantly in India. According to a recent Times of India report,<sup>1</sup> insurance fraud resulted in a loss of more than INR 10,000 crores to the insurance industry. Some of these fraudulent incidents may be attributed to inadequate due diligence in writing of insurance policies and criminals' efficiency in defrauding entities such as doctors, surveyors and vehicle-servicing centres in the ecosystem by providing the wrong information.

Subsequent sections of this paper will delve deeper into the types of insurance fraud and actions insurers can take to detect and manage fraud more effectively by leveraging digital data and technological advances.



<sup>&</sup>lt;sup>1</sup> http://economictimes.indiatimes.com/articleshow/59448276.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst

## **1.2. Insurance Fraud**

# Definition of insurance fraud according to Investopedia:

"An illegal act on the part of either the buyer or seller of an insurance contract: Insurance fraud by the issuer (seller) includes selling policies from non-existent companies, failing to submit premiums and churning policies to create more commissions. Buyer fraud includes exaggerated claims, falsified medical history, post-dated policies, viatical fraud, faked death or kidnapping, murder and much more."

Seller-side insurance fraud may be attributed to multiple reasons – (i) 'flavour of the month' sales leading to a poor product fitment for customers, (ii) lack of proper governance during the sales and customer-onboarding process resulted in misrepresented information or (iii) the intention to maximise earnings by selling policies to non-existent customers or churning the policies of existing ones. We will not discuss seller-side insurance fraud in this paper in view of the significant initiatives of regulators and insurers to ensure a fair-selling process and institutionalise controls in sales management and customer-onboarding processes.

Buyer-side insurance fraud can take place due to policyholders' lack of awareness or limited understanding of policies, or may be a deliberate attempt made by them to fraudulently claim money. A study conducted in the UK indicates that many people do not associate exaggeration of home insurance claims or falsification of claims as fraud. In their minds, the term fraud seems to be



reserved for major swindles or billion-pound corporate fraud. It is therefore important to remember that fraud management is not only about proactive detection and efficient analytics, but also about creating the right customer awareness and educating them after they purchase policies.

### **Buyer-side insurance fraud:**

- **Misrepresentation:** Before they are issued policies, buyers should be provided complete and accurate information on the benefits of these. Misrepresentation due to non-disclosure may be deliberate and inadvertent.
- Fictitious/Overestimated claims: Policy-holders may stage incidents such as stolen cars or injuries, exaggerated damages or losses, abetted by people with considerable expertise and knowledge of the workings of the industry. Incidences of digitally forged documents have been rising due to people's increasing familiarity with digital technology. In some claims, fraudsters pretend to own products that do not belong to them while submitting their claims by using computer technology to provide evidence of ownership.
- **Over-utilisation:** Policy-holders submit claims beyond the covered limit defined under the terms and conditions of their policies.

Fraud control is the balance between the profitability of fraud and investigation, especially in high-transaction business such as financial services and insurance. While probability of fraud helps to raise the right flag during issuance and handling of claims, profitability of investigation identifies the extent of damage, and therefore, helps in effort allocation-related decisions against possible fraud. Consequently, a careful balance needs to be maintained between the two to ensure that products are offered to the right customer and the right effort is made while handling claims.

We expect digitisation of insurance fraud management to have a profound impact on how the industry operates. Insurers have already begun taking structural actions such as sharing data to detect repeated fraud in the system.<sup>2</sup> This has resulted in blacklisting of around 70 locations in order to prevent fraudulent claims.

As this trend continues, fraud analytics will have significant application in reducing incidents and damages. In the next section, we will discuss how insurers can curate and leverage data for enhanced detection and management of fraud.

<sup>2</sup> http://economictimes.indiatimes.com/articleshow/56766946.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst

# 2. Fraud Analytics and Management

## 2.1. Availability of Data

According to Petter Bae Brandtzæg of SINTEF ICT, "A full 90% of all the data in the world has been generated over the last two years." (Science Daily). This indicates that digitisation and digital creation of data has never been at this level before. The Government's emphasis on Digital India, Demonetisation and digital transactions is a step in the same direction for India. In fact, we are all seeing digitisation enter our lives. For instance, nowadays, we see usage of digital wallets even at road-side outlets that were till now only used for cash transactions. At the same time, digital businesses such as eCommerce have had to adapt and offer physical payment modes. Consequently, the lines between the digital and physical modes are blurring.

In India, the smartphone industry is a growing market, with around 36% of mobile users in the country being

expected to own smartphones by 2018. This figure was at 21% in 2014. The global smartphone penetration forecast indicates that around 50% of mobile users worldwide are expected to own smart devices by 2018. In comparison, 59% of mobile users in China and 87% of mobile users in the US are forecast to use a smartphones by 2018 (Statista.com). Similarly, the internet user base is growing at an annual rate of around 12% according to an IMRB report (March 2017). This indicates rapid penetration of internet access in India.

This rapid increase in penetration of smartphones and increased access to the internet is fast making India a 'digital country' with the "Mobile first" mode of internet access. All these touch-points and transactions are leaving digital footprints that can be leveraged to mine deep insights.

### 2.1.1. Data Sources

A challenge for insurers entering the new digital data universe is what data they should collect, where they should collect it and what they should do when they access it.



## 2.1.1.1. Internal data sources — traditional

Existing data sources used by insurers for fraud management: This data is usually stored in a structured manner in IT systems, e.g., data warehouses. Usually this data is supplemented by experience and anecdotal learning and examples while making decisions.

### 2.1.1.2. Internal data sources — emerging

# Insurance providers have also started harvesting additional data sources in their ecosystem

This data is easily accessible from internal company sources or close partners in the eco-system. However, it cannot be consumed directly, since it has images, text pertaining to phone calls and is as such not in a ready machine- consumable format. Big Data tools are needed to convert this data into usable formats.

## 2.1.1.3. External data sources

While internal data sources continue to be the most reliable, external data sources are expected to expand.

Eco-system	Emerging options	Data providers
Medical records	• Internet of Things (IOT) and wearables	• Social media
Motor vehicle data	<ul><li>Special purpose data, e.g., images from drones to assess damage</li><li>Image analysis for car accidents</li></ul>	Web behaviour
<ul> <li>Prescription data (online stores)</li> </ul>		Aggregators
Mobile behaviour		
<ul> <li>Retail partner data – buying and loyalty behaviour</li> </ul>	Sensor data	

• Data on banking behaviour

This data has to be sourced from the larger ecosystem and external sources. Sometimes this involves commercial considerations or data bartering agreements. This data also requires extensive processing and formatting before being used.

## 2.1.2. Technical Considerations

For consumption of digital data, technical advances in Big Data and Open IT architectures are the emerging norms.

- Big Data manifests itself as data in multiple formats (images, sounds and video. It is large in volume, varies in its source and quality, and is a reality in this digitised age. Computing and processing technologies and techniques need to be deployed to use Big Data and output it in understandable formats.
- Open architectures and technologies that enable seamless movement of data between organisations need to be embedded in insurers' IT systems. This will

enable real time movement of data between customers, insurers, investigators, processors and service providers (hospitals, auto workshops, etc.) for quick analyses of large data points.

• An enterprise-related view is needed of fraud and digital enablement to capture data from each touchpoint and feed it into 'fraud intelligence' processes. Each touchpoint thus becomes an opportunity to collect data to mitigate or manage fraud.





## 2.2. Advances in Analytics and Artificial Intelligence

Traditional fraud management for claims is organised in the following three steps:



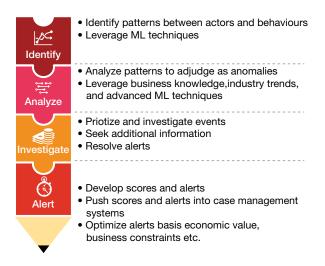
Development of a rule-based/ heuristic model for fraudulent scenario to adjudge future claims

### However, this approach has some limitations:

- 1. Exhaustive coverage of fraud is not possible, since statistical models are developed by only using a sample of the data.
- 2. This methodology depends on historical data. Therefore, any new cases of fraud, their modusoperandi and trends are not detected or flagged.
- 3. Finally, this approach regards fraud management as only a function of an underwriting or claims team. Fraud analysis-related data is only available or provided by specific departments and data from other departments pertaining to various touchpoints is missed out. Moreover, such data is limited in volume, since it's only extracted from limited sources. This method works in silos and is not capable of handling ever-increasing sources of data, Big Data, information from different channels and functions in an integrated manner.

Digitisation results in availability of a substantial amount of data, quickly and in time, with extensive computational power to ingest, analyse and predict possible fraud cases.

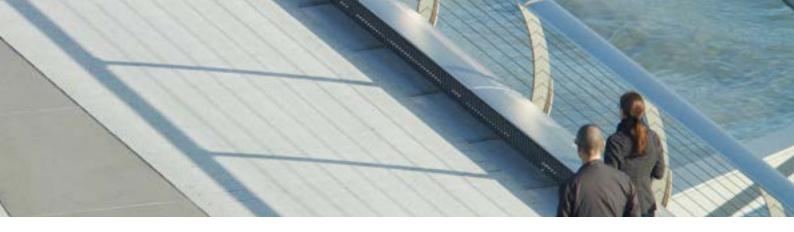
# A modern fraud management system works not just for identified fraud, but also to prevent it:



### This approach provides a framework that addresses the challenges thrown up by the traditional approach:

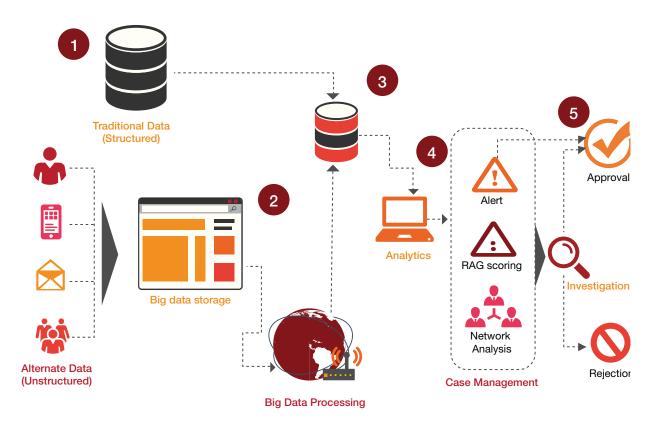
- 1. Use of advanced analytics (Artificial Intelligence (AI) and Machine learning (ML)) to unearth patterns and anomalies
- 2. 'Always on' systems with Big Data capabilities to ensure analysis of continuous data and not just sample or anecdotal models
- 3. Use of data from multiple sources (customer touchpoints, eco-system, and industry) to derive insights
- 4. Automated exploratory analysis capabilities enabling capture and extraction of insights from live data; and self-learning capabilities in techniques such as neural networks allowing re-balancing of models based on new trends





## 2.3. Illustrative Digital Fraud Management System

Key features of fraud management technology of the future:



- 1. Structured data from traditional internal sources, e.g., policy administration, claims, underwriting (mentioned above) is sourced and stored in a fraud repository.
- 2. Alternative data (emerging and external) is ingested through a Big Data infrastructure. This infrastructure transforms and converts this data into structured formats, e.g., tags for auto images indicating whether damage being new or old.
- 3. The fraud repository is able to link data from various sources in a logical manner for easy analysis, e.g., all data relating to an event is pooled together.
- 4. An analytics engine then analyses the data using AI techniques to generate alerts, scores and linkages between the entities. The alerts are based on individual anomalies or outliers in trends, e.g., similar health claims made by other family members. The scores are based on the propensity of fraudulent events occurring on the basis of modelling of multiple factors.
- 5. These can then be used for straight-through processing. High-risk cases may be rejected or routed for further investigation or additional information.

## 2.4. Applications for Managing Fraud

An end-to-end digital fraud management capability opens up many opportunities that were not available so far:

- Identify anomalies: By leveraging Artificial Intelligence and machine learning, trends and patterns can be identified in claims data and be used to flag alerts, e.g., by identifying a pattern where every fifth claim reported by a car workshop relates to damage to a wing mirror. Such patterns may not emerge when different underwriters are reviewing different claims.
- **Predictive analytics** can be used to generate the likelihood of a particular event being fraudulent. Such techniques amalgamate hundreds of data points to generate such predictions.
- Network analysis is used to unearth hidden linkages between events and people, e.g., in a car accident, the phone numbers and addresses of all the people and vehicles can be accessed. However, information about drivers' and vehicles' past accident records and the addresses of the concerned people could be critical in raising suspicions.
- Alert-optimisation techniques can be used to gauge the severity of potential fraud, to enable optimal use of investigation resources, e.g., utility companies are using optimisation techniques to investigate meter-related fraud on the basis of the likely value and cost of an investigation.

- **Image-based underwriting** processes are being introduced enabling claims processing by using images of accidental damages, understanding losses from catastrophes caused by extreme weather conditions and natural disasters, as well as the nature of the damages.
- Natural Language Processing (NLP) capabilities such as text-mining, sentiment analysis, classification and clustering, and extraction of information are enabling generation of insights from text sources that have been traditionally analysed manually. Fraud specialists and underwriters of claims may also not need to be data query experts. NLP-based systems can be used to extract information from databases by simply typing queries in plain English – like by using a search engine.
- Automation through usage of **cognitive** computing may be used to automate claims and fraud processes, enabling higher throughputs while improving the quality of underwriting.

# 3. The Journey

## 3.1. Defining and Measuring Success

While fraud management and mitigation include a large agenda for insurers, establishing the return on investment is not always straightforward. For one, in the absence or low incidence of fraud, it is not easy to associate an intervention explicitly with this.

The first step in quantifying the impact is to arrive at the Total Cost of Ownership (TCO), which an amalgamation of analytical capability acquisition (including software, hardware, networking, security, data costs and model development costs), ownership and operation costs (model deployment and management, support, insurance, data scientist staff cost and model downtime costs) and post ownership costs (de-commissioning, disposal and replacement).

Next, the returns have to be calculated in monetary terms. The returns of a fraud detection system depend on the number of cases investigated, and the fraction of those that are actually fraudulent. This fraction is a property of the fraud detection system and depends on the power of the system to detect fraudulent cases. An exposure amount is usually assigned to potential fraud, sometimes weighted by the fraud risk, to arrive at the expected fraud amount.

Finally, the total cost of handling fraud (handling, inspecting and investigating cases) can to be estimated.





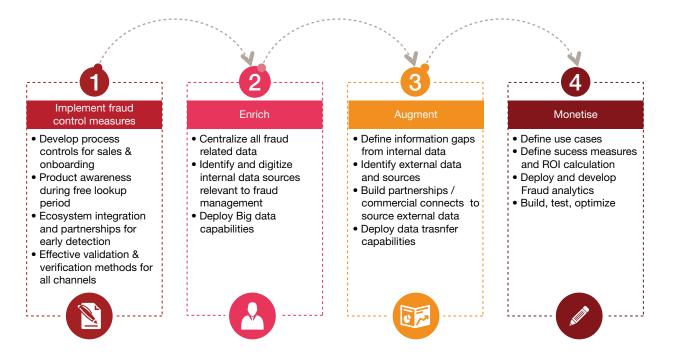
## 3.2. Defining a Clear Fraud Management Programme

Various insurers are at various stages in their fraud management strategies. In light of fast-increasing fraud and the shift towards a digital business model, insurers need to review their strategic fraud management frameworks, benchmark fraud events and explore optimisation opportunities.

# In our experience, an exhaustive fraud management framework should have following key components:

• Fraud control measures: Insurers need to institutionalise their process disciplines in sales, onboarding and claims. Strong digital integration with channel partners and service providers (vehicle service centres, hospitals, etc.) will ensure that any deviations from established processes are recorded and reviewed. Insurers have already begun to use enablers such as visual screening, IOT and predictive analytics to develop required control measures. Digital solutions can be leveraged for improved validation and verification at time of onboarding and during intimation of claims. Integration with the recently launched Insurance Repository System (IRS) for electronic pay-outs will also help in reducing fraud, since bank mandates will be collected upfront.

- Curing and enrichment of data: Data needs to be thought of as their most valuable asset by insurers. Understanding where this data is coming from, what information it provides, who uses it and how it needs to governed and managed is of prime importance. This ensures that all relevant information is available on time in known locations, and fraud specialists do not need to hunt for data and information. Finally, enrichment of data needs to become an ongoing activity. For instance, monitoring of social media may show that a customer has relocated to a new city – this should become an outreach trigger to capture the new address, update other customer-related information and capture the customer's experience.
- Augmentation of data: Once existing available data is curated and mapped, any information gaps in identifying and addressing frauds need to be assessed. Some of this information may be available externally. Data sources have to be identified. Some data sources may require commercial or business partnershiprelated input. And finally, this new data needs to be brought into organisations seamlessly.
- Monetisation of data: Analytical capabilities need to be developed and deployed once the data gaps are filled. What is required after that is identification of specific risks and gaps in the existing fraud management framework, an understanding of what analytical solutions are needed to address these, development, testing, deployment and measurement of the impact. Finally, the insights derived and the learning should be fed into the fraud management system.



# 4. Conclusion



Digitisation opens up numerous opportunities for insurers in the area of fraud management. Fast-paced digitization in India is resulting in significant digital footprints for events, transactions, behaviour, beliefs and attitudes that can now be used to understand and effectively mitigate fraud.

In this digital age, data is emerging as a new high-value asset. New age fraud management requires efficient use of emerging and alternative external data to augment traditional fraud analytics. And Big Data technologies enable machines to make sense from images, text, voice and IOT (telematics, wearables and drones) to augment traditional tabular data. Finally, in view of the high levels of external data integration being espoused, one of the key challenges insurers will face in their journey to establish such systems will be around data security, privacy, quality and access.

Advanced analytics is a vehicle that leverages data to generate insights and assist decisions. Today, fraud management is increasingly relying on Artificial Intelligence techniques to predict the occurrence of fraud by leveraging data from multiple sources. These techniques are now moving in the direction of allowing machines to learn from past experience and improve their predictive power through time.

Finally, it is clear that adapting to the digital analyticsenabled fraud paradigm will give insurers a competitive edge by a reduction in their premium- and risk capital-related requirements. They should therefore embark on this journey at the first opportunity to avoid losing out.

# Broadening Investment Horizons: Policyholder and Shareholder Funds



# Current scenario in the Indian insurance industry

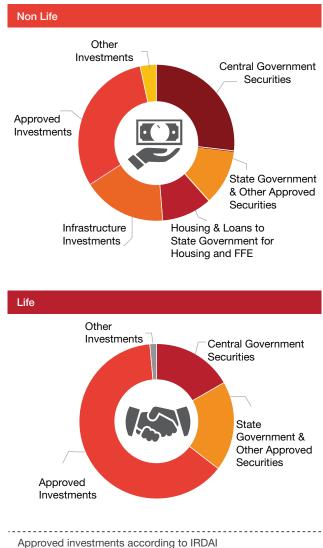
In today's financial and economic environment, insurers are looking for ways to improve their return on capital. Low yields are creating challenges for insurers, prompting companies to rethink their investment strategies. They are looking at ways in which their investment strategies can be made more efficient enhancing returns without increasing their overall risk and economic capital requirements.

One of the ways in which insurers seek to accomplish this is through diversification—by investing in less traditional, more illiquid but higher-yielding assets. In view of the nature of insurers' liabilities and the high liquidity levels of their existing assets, this could mean that there is significant scope for them to absorb risk in their pursuit of enhanced returns, without significant adverse consequences.

Strategic allocation of assets and management of investments is vital because of the scale of investments on insurance companies' balance sheets and the impact of the result of investments on their profitability. Assets under the management of non-life insurers stood at INR 13,000 crore as on 31 March 2016 and have seen a 16% increase during the year, while assets under the management of life insurers stood INR at 25,00,000 crore as on 31 March 2016 and have seen an increase of 11% from last year.1

Non-life insurers predominantly invest in secure, liquid bonds and near-cash instruments. However, in today's low interest rate environment, companies need to determine whether a slightly higher market and/ or liquidity risk may be beneficial for them. For most companies, a modest additional controlled market risk could help them achieve a worthwhile increase in expected returns without significantly increasing their economic capital.

Life insurers' liabilities are typically long term and predictable, and are backed by their large holdings of bonds and equities, which have relatively high levels of liquidity. However, this liquidity comes at a price and companies need to evaluate how they can improve their returns on capital by questioning the opportunity loss associated with traditional investments. The investment pattern of assets under the management of life and non-life insurers in India as on 31 March 2016:



(Investment) Regulations

Source: World Economic Forum Report

# **Regulatory framework** and guidelines

### Principle framework

- Applicable in countries such as the US, the UK and France
- No mandated investment pattern
- · Eligibility and admissible limits on assets for which credit can be availed for solvency-related purposes



### Prescriptive framework

• Applicable in countries such as India, Canada, Italy and Japan

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- Asset allocation-related decisions dedicated by mandated investment pattern
- Restrictions on minimum/ maximum exposure limits on certain classes of assets

### Other special features of the IRDAI prescriptive framework:

- The pattern of investment is not applicable for funds shareholders hold in business beyond the required solvency margin, and is not considered for calculation of their solvency margins.
- Insurers may deal in financial derivatives, but only to the extent permitted. They are permitted to invest in Private Equity and debt funds.

### SEBI's regulations for insurers:

- Investment in category-I and category-II Alternative Investment Funds (AIFs) is permitted for the following:
  - Category I: Infrastructure Funds, SME Funds, Venture Capital Funds and Social Venture Funds, as defined in Alternate Fund Regulations
  - Category II: at least 51% of the funds of such AIFs to be invested in either infrastructure or SME entities, or the Venture Capital undertakings or Social Venture entities
- · Exposure limits for venture funds and AIFs put together for life insurance companies — 3% of the respective funds and 5% of the investment funds of general insurance companies

However, while insurers agree that these initiatives have resulted in additional options, not many of them have invested in these categories as yet.



# Factors affecting investment strategies

## 3.1. Liabilities

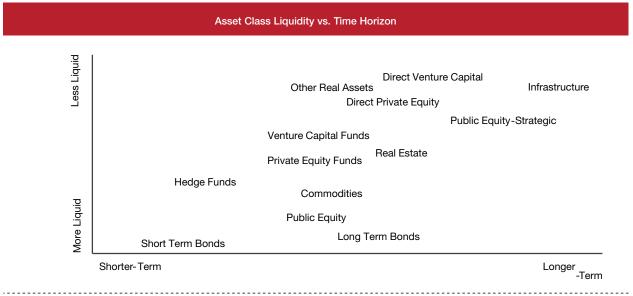
The main consideration for insurance companies while making their investment-related decisions is their liability profile in terms of pattern, nature and currency.

The liabilities of general insurance companies are primarily short term in nature, and since contracts are subject to annual reviews, the prospect of inflation substantially increasing their liabilities is fairly remote. Therefore, their funds need not be invested in 'real' assets. However, the liquidity of the investments of such companies can be an over-riding consideration and unfavourable underwriting experience for them.

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## 3.2. Liquidity

It is important that insurance companies invest their liquid funds judiciously to ensure adequate returns on policyholders' and shareholders' funds, to meet the combined objective of maximisation of yield and safety.

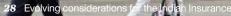


Source: World Economic Forum Report

The graph above depicts a range of assets in terms of their liquidity and time horizon. Assets such as major infrastructure investments and direct Private Equity have some characteristics that attract long-term investment and deter short-term ones. These entail substantial upfront costs and are difficult to sell in the short term.

## 3.3. Other factors

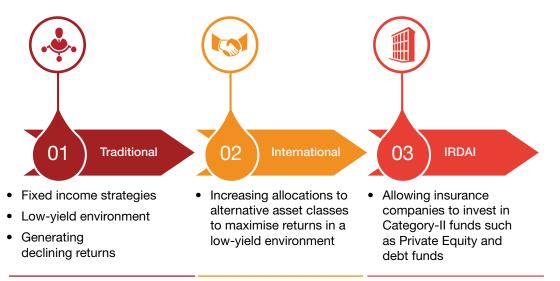
The risk appetite of organisations and their expectation of the future economic environment need be considered while determining investment policies. Moreover, the tax-related implications for insurance companies constitute an important factor that influences allocation of assets between fixed income and growth-oriented investments.





# **Outlook and opportunities**

### 4.1. Outlook



### 4.1.1. Traditional

Before 2008, core fixed income assets comprised most insurance investment portfolios, and served as insurers' primary source of investment income. After 2008, low interest rates dramatically drove down bonds' yields, reducing this income and threatening the overall profitability of many insurers.

### 4.1.2. International

Around the world, many insurers in the USA and Europe have increased their allocations to a variety of alternative asset classes, including hedge funds, Private Equity, specialty investments such as infrastructure, mineral rights, aircraft leases, and debt and real estate limited partnerships, in an attempt to maximise their returns in a low-yield environment.

### 4.1.3. IRDAI

While investment in any Category I fund was generally considered restrictive, Category II segment funds should provide a greater opportunity to investors, since these comprise a substantial number of funds with long track records. Insurance companies could commit themselves to Private Equity funds over the coming years in order to achieve their long-term targets.

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### 4.2. Investment opportunities

### 4.2.1. Private Equity

Insurers, particularly life carriers with long-term liabilities, have been attracted to Private Equity due to the multi-year investment cycle and illiquidity premium option it offers. Many insurers are also attracted to its lack of mark-to-market pricing, which enables them to avoid the earnings-related volatility generated by Public Equity investments. Certain income-oriented strategies such as 'mezzanine finance' are now the preferred option of many insurers, who are reallocating their alternatives portfolios so that they can enhance their exposure to hedge funds by maximising their illiquid equity-risk budgets.

### 4.2.2. Property and derivatives

Insurers have been including investment in property in their portfolios to a certain extent, but are finding it difficult to determine the risk and returns on property, which realistically capture illiquidity and other aspects of property pricing. Similarly, investment in fixed income derivatives can enable them to hedge some of the interest rate risk to which they are exposed, perform duration and cash flow matching, and provide products with enhanced guarantees to policyholders. However, the lack of a liquid market for corporate bonds, the demand for long-dated contracts such as swaps, the high cost of maintaining collateral and counterparty risk have been the major deterrents for insurers in making such investments.

### 4.2.3. Digital (direct and indirect)

Digitisation can play a major role in the growth of the insurance industry, and insurance companies across the world are going all out to adopt digital strategies in their business. Digitisation offers agile and innovative carriers real opportunities to grow. To make the most of these opportunities, life insurers need to identify and put in place cohesive digital strategies and transformation plans in their operations, and insurance carriers have to realise the importance of investing in and implementing digital tools to reinvent their business models. This is particularly relevant, because compared to other industries, life insurers lag behind in adopting digitisation, in part because their views diverge on the pace of change and threat of digital disruption in the industry.

Although the traditional insurance business model has proved remarkably resilient, digitisation has the power to reshape the industry as it has many others. To succeed in this new landscape, insurers need to review their digital strategies, capabilities, culture, talent, organisations and transformation road maps in a structured manner.

In order to boost their profitability, some of the world's largest insurers have committed more than USD 1 billion in their investment in technology start-ups as the industry attempts to catch up with other parts of the financial services sector. Many prominent European insurers have set up specialist Venture Capital funds, which they have dedicated to investment in start-ups that



# **Challenges and solutions**



### 5.1. Developing expertise

A potential barrier to investing in new asset classes, especially specialised ones, is that insurers' asset managers do not have the requisite skills and experience, which can be a competitive disadvantage for them. However, this issue can be addressed by the tactical use of external fund managers in some cases, with the large majority of assets being managed by in-house asset managers. Reducing the portfolio risk by diversifying it and investing some of the assets in a wide range of geographies and asset classes enables insurers to take additional risk in areas where the best returns can be realised.

Increasingly, insurers are turning to managed accounts providers, particularly for hedge funds and managed futures solutions. These managed account platforms offer insurers reduced fees, security, transparency and liquidity of segregated investments as well as superior access for managers.

## 5.2. Asset Liability Management

Asset Liability Management is a key function in insurance investment management and enables establishment of a portfolio of investments that closely replicates insurance liabilities. The lack of long-duration assets and an active derivative market in India adds to the challenge. Exploration of new opportunities and adoption of sustainable investment practices will therefore be a pre-requisite for management of investment mandates in the future.

## 5.3. Cost efficiency

Insurers are struggling with a number of issues as they strive to incorporate alternatives in their portfolios in a cost-effective and risk-managed manner. These include ensuring the security of investments and the validity of information, which are critical for managing risk and avoiding unanticipated investment failures. Assets must generate adequate net returns after expenses and capital charges to merit use of alternatives, relative to other investments. Alternative assets have stringent riskreporting needs that add to the burden of expenses.

To address these challenges and grow their exposure to alternative asset classes, insurers can take advantage of diverse hedge fund and Private Equity access points. However, along with the double layer of fees, these portfolios are rarely optimised for insurance companies' objectives. Only recently have fund-of-funds providers begun to develop insurance-specific portfolios that are tailored to be in sync with liquidity and volatility targets, and insurers' broad investment strategies (e.g., replacement of fixed income assets).

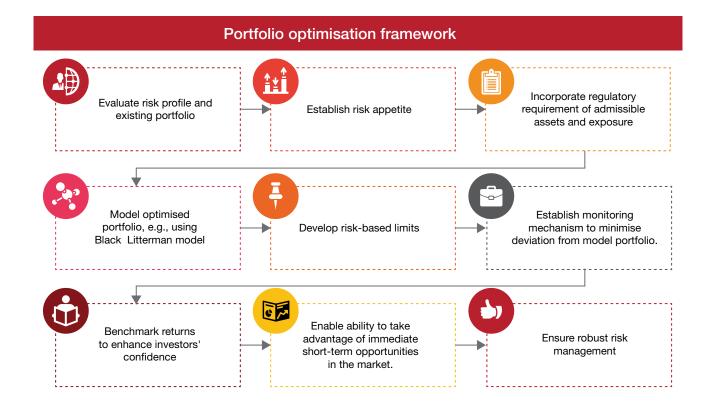
# Way forward

To date, the high level of liquidity in insurers' assets has meant that they have not had to worry too much about liquidity risk. However, the more they look to benefit from their ability to absorb such risk, the more proficient they need to be at managing it.

Global average investments in digital technologies are increasing over the years, while the insurance industry in India is lagging, both in its level of digitalisation and its ability to realise financial returns on its digital investments. With digital technologies comprising the core of the insurance industry's future growth potential, as well as being a preferred means of doing business, insurance leaders must make sure their digital investments multiply value creation substantially.

Tomorrow's winners will be companies that effectively align their investment strategies with their business objectives and execute initiatives that unleash the potential of emerging investment opportunities.

To establish such effective strategies, portfolio optimisation techniques that use quantitative and qualitative factors will be the need of the hour.





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The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry,

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CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry

to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, healthcare, education, livelihood, diversity management, skill development, empowerment of women, and water, to name a few.

The CII theme for 2017-18, **India Together: Inclusive. Ahead. Responsible** emphasizes Industry's role in partnering Government to accelerate India's growth and development. The focus will be on key enablers such as job creation; skill development and training; affirmative action; women parity; new models of development; sustainability; corporate social responsibility, governance and transparency.

With 67 offices, including 9 Centres of Excellence, in India, and 10 overseas offices in Australia, Bahrain, China, Egypt, France, Germany, Singapore, South Africa, UK, and USA, as well as institutional partnerships with 344 counterpart organizations in 129 countries, CII serves as a reference point for Indian industry and the international business community.

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