Competing in a new age of insurance: How India is adopting emerging technologies
As the major global insurance players are busy preparing to enter yet another prosperous market in Asia—Myanmar—it is useful to look back at the last two decades of the opening up of the market in India. The focus has shifted from a mixture of anticipation and trepidation of operating in a vast and diverse country to a more studied approach in consolidation and focus on profitability.

The last two decades have been interesting for the Indian insurance industry; they may be divided into three distinct phases. From 2000–2008, there were baby steps, experimentation, seizing of opportunities and expansion. The next phase, 2008–2014, witnessed the global financial meltdown and represented a period of uncertainty, indecision and a sharp increase in regulatory scrutiny; accordingly, companies began relooking at their strategy and expansion. Following the reforms to the Insurance Act and stabilisation of the economy, the current phase from 2014 onwards has seen renewed confidence in growth, and certain sectors like health and agriculture have moved forward aggressively. Also, the digital revolution has pushed insurers to automate and seek out opportunities to digitise every part of the organisation. Listing of insurance companies on the stock exchange has opened up their black boxes to analysts, thereby introducing further competition in the race for digitising customer interfaces.

Insurance plays a fundamental role in the economy of a country. It protects the future earnings of individuals and companies, enables risk transfer and smooths out the risk patterns, thereby protecting the GDP of a country. Therefore, measuring the premiums as a percentage of GDP and determining the level of penetration is not appropriate as the premiums are fees to protect the GDP. Rather, an appropriate measure would be to see what proportion of the GDP the sums assured cover. That way, in the fullness of time, adequate penetration should be measured by the following:

1. The total life insurance sums assured should be around 5–10 times of the total incomes produced.
2. The total assets and liabilities generated by the economy should be covered up to approximately 80–90%.
3. The density of insurance should be taken into consideration as to the average percentage of people above the poverty line who are covered.
4. Finally, the percentage of population covered by government and social schemes should be considered.

The conglomeration of the above numbers will provide an accurate assessment of insurance penetration. While India will still feature among the low penetration economies, some surprises may be in store.

Finally, merely adopting technology and automating processes will not eliminate inefficiencies. New technology gives rise to new capabilities and processes should be redesigned accordingly to reduce wastage and delight customers. A change in approach is needed whereby technology is viewed as a fundamental business tool rather than an operational and process tool. The natural inhibition in a regulated industry can be dispensed with if organisations work with all stakeholders, including regulators and the government. The healthy interest regulators are showing in sandboxes bodes well for the industry.
The modern insurance customer prefers simple, customised and intuitive policies, an easy process and a simple and tangible cost breakup. Insurance providers have begun to appreciate these preferences and have put the customer at the centre of product design, eliminating all poor experiences along the ‘moments of truth’ in his/her insurance adoption journey. This shift in product design from product to human-centric design is a fundamental shift in the Indian insurance industry.

The transformation into a human-centric insurance company and product is time-consuming and complicated. Design thinking trains organisations to focus on minimising customer effort to maximise customer value. PwC’s BXT approach helps create human-centric, design-thinking based solutions as it encompasses the power of perspective.

While technology cannot replace the human-centric approach, it is a key enabler for this approach. Emerging technologies like artificial intelligence, the Internet of things, and blockchain powered by analytics and the cloud can enable insurers to develop human-centric propositions. Some of the large insurers have a legacy IT landscape that is difficult and costly to transform. However, the good news is that most Indian insurers have newer and flexible IT landscapes that are well positioned to adopting these emerging technologies to enable human-centric propositions.

Abhijit Majumdar
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Executive summary

With written gross premiums of USD 94.48 billion in FY18, the Indian insurance industry is the fifteenth largest in the world in terms of premium volume.\(^1\) Owing to rising awareness, innovative products and a proliferation of distribution channels, the insurance industry in India is expected to reach newer heights by 2020.\(^2\) Though insurance reach is still low in the country and there exists a huge untapped market, government policies of financial inclusion are gradually helping to insure the uninsured.

PwC’s Digital IQ Survey revealed that innovation in Indian companies is driven more by industry and competition and less by customer insights. Ideally, customer insights should be the primary factor behind constant innovation in the industry.\(^3\) The current situation is likely to complicate customer satisfaction efforts as there is a risk of competition being the driver instead of the needs of customers. As a result, a business may have no differentiated offerings or these may be delayed. In the worst case scenario, the efforts may not be solving any of the customer’s issues.

To understand and explore how the ecosystem of customers in the insurance industry is evolving, in 2019, PwC conducted a survey and discussion with around 200 respondents (including customers, agents and insurers). Further, we gathered the perspectives of all stakeholders on how the industry is working towards meeting customer expectations and how emerging technologies can help in bridging the gap.

Across industries, the focus is shifting from a product-driven approach to customer-driven strategies, and the insurance industry is no exception. With technology advancements and their growing adoption, every user segment is now becoming more aware and demanding and they are benchmarking service delivery not only against other segments of the financial services industry but also across other industries such as retail, travel and entertainment.

Technology exposure in India is leading to the rise of digital natives whose communication, decisions and actions are embedded in technology; Gen X, Y and Z are inherently impatient and information and choices are freely available. The insurance sector cannot ignore this growing customer segment when developing its strategy and roadmap. Further, transaction security, technology compatibility, data privacy and 24x7 availability are now merely hygiene factors for today’s customers.

While use of technology continues to expand, businesses that cater to a large number of digital natives need to start adapting their approach in order to understand and deliver according to customer expectations.

\(^2\) Ibid.
The insurance industry in India is going through a fundamental shift. Rising awareness, accessibility, affordability, regulatory reforms and economic growth are some of the key factors impacting the industry. For some insurers, it is a phase of re-establishment and keeping themselves relevant. For others, dealing with these disruptors is critical to their survival. The government’s decision to permit 49% foreign direct investment has made the Indian insurance sector lucrative to foreign investors and enabled insurers to secure capital to work on aggressive plans related to expansion and innovation. Further, insurers who have been in business for at least 10 years are allowed to raise capital through initial public offerings (IPOs).

1.1 Changing face of the Indian insurance industry

1.1.1 Rise of digital: A game changer

The digital revolution in India has disrupted the business environment in all industries and the insurance industry is no exception. Increasing Internet penetration (with the number of users in India expected to rise from 429 million in 2017 to 829 million by 2021 at the rate of 17.9%)\(^4\) will continue to influence the insurance business as well as other industries.

Given that digital technology has the potential to break the traditional barriers of the insurance sector like product awareness level, limited customer touchpoints, access to knowledge, service availability and payments, the business environment is bound to become more dynamic and competitive. Insurers are now compelled to ensure their pricing is competitive and is able to show value for money in order to remain significant. By maintaining transparency in product features, cost and services, digital channels are levelling the playing field.

Insurers are also investing in the digitisation of business processes to achieve efficiency and cost reduction. As per an industry estimate, digitisation can reduce around 20–30% of the cost of non-life insurance products and 15–20% of the cost of life insurance. Apart from the cost benefit, digital transformation also creates opportunities for synergies between them. In future, lack of synergy with customers will affect the market share of insurers. It is one of the compelling reasons for insurers to rethink their strategy and focus on customer-oriented initiatives.

“Two key areas which need to be addressed for improving the conversion rate from digital modes are – awareness needs to go up and products need to be simplified. The way insurers have designed it with a focus on differentiating their USPs, it becomes a complex product which is difficult for the customer to understand and buy in couple of clicks.”

Vishwanath Mahendra, Chief Actuary and Chief Risk Officer, Apollo Munich Health Insurance Co Ltd

Source: PwC India's Insurance Technology Adoption Survey

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1.1.2 Customer archetypes

Customers have evolved significantly and look for the most transparent and seamless experience. Paper-based transactions and long forms are a thing of the past, and consumers now rely on smartphones for information/feedback, so insurance companies need to embrace the digital revolution or risk becoming obsolete.

As per our survey findings, customers can be classified into three different buckets based on their buying behaviour (e.g. level of involvement in purchase decisions), attitude (e.g. towards a new experience) and expectations (e.g. in the form of services and support received).

As customers have evolved, age-old marketing and communication strategies are not going to help with customer acquisition and retention. Customers need interaction points instead of just one-way communication channels.

### Customer archetypes

**Traditionalists**
- Conventional approach
- Prefer human touch
- Apprehensive about digital modes
- Trust is more crucial in driving loyalty than cost
- Attracted towards highly responsive insurers who put customer’s interest on priority

**Transitionalists**
- Rational customers whose decisions are largely based upon ‘value for money’
- Price conscious
- Prefer human advice but don’t mind moving to computer-only advice
- Ready to change channels of purchase

**Digital natives**
- Have recently entered the working population in urban areas
- Technologically advanced
- Demand flexibility
- Highly receptive to innovative models
- Not comfortable with complex T&Cs and benefit structures

1.1.3 Evolving value chain: Role of web aggregators

Web aggregators have emerged as a new distribution channel in the insurance value chain. After a regulation on web aggregators was passed in 2013, the count of registered web aggregators increased from 11 in 2013 to 21 in March 2017. They are now functioning as platforms for insurance products from multiple insurers and providing information about product features, benefits, price, claim settlement ratio and coverage, etc., along with a comparison of insurance products. Although such facilities are helping customers to evaluate multiple products on a single platform and reduce the overall research time, there is a risk of commoditisation of insurance as these comparisons mainly revolve around price rather than the benefits and suitability of the products. While this scenario is expected to improve due to competition among web aggregators, the ultimate decision will be in the hands of the customer.

1.1.4 Changing business model

The conventional insurance model used to be product centric and marketing-channel driven, while the modern model will keep the customer at the core along with a suite of digital technologies and ecosystems to tap the customer base. Incumbents need to embrace the changing business models or they risk losing a major chunk of pie to new participants. Though unimaginable today, a ‘wallet vs. banks’ type of battle could break out in the insurance sector too. A common topic of debate is whether existing distribution channels will be relevant in the digital world or become redundant. Technology is rapidly enabling all parties involved in the value chain to become more productive and thus improve their returns on effort.

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1.2 Emerging trends in the Indian insurance industry

Through discussions with stakeholders involved in the value chain, we have noted four key trends which are disrupting and reshaping the insurance competitive landscape. All of the industry trends are slowly converging and ultimately pushing a sector that is slow to adapt by challenging traditional business processes, products and assumptions. To rise to the competitive forefront, insurers are rethinking and realigning their business models as per customer needs and the expectations of future target groups who are likely to become their customers in the next 10–20 years.

i. Increasing customer expectations

Customers’ expectations are getting set outside of insurance by digital native companies that offer convenience and simplicity, leaving these customers frustrated that their insurance experience doesn’t match their lifestyle and needs. Today’s customers have set new standards of convenience, ease of use and value. For a long time, the traditional insurance business model proved to be resilient. But now, it’s also beginning to be impacted by digital.

While some industries seem to be making quantum leaps in technology, digital and online are not always the answer when it comes to customer expectations. Today’s task-rich and time-poor consumers expect more than just 24-hour access, competitive prices and good quality products. In an era where consumers across markets expect personalised high-touch service, insurance, by its very nature, remains a low-touch industry. Thus, the problem of ‘lack of touch’ lies at the heart of insurance as high-quality interactions are known to be directly correlated with loyalty.

ii. Shifting product needs

Declining relevance of traditional products with decreasing number of customer touchpoints and increasing requirements to innovate insurance product offerings to meet changing customer behaviour and needs.

Offering non-insurance services which are a natural extension of the core product, like financial planning and health monitoring, can be the best way for insurers to gain the attention of consumers and become key players in ecosystems of interconnected services. Ecosystem services can not only build loyalty but also increase profits. Also, access to a rich stream of customer data from these services can help in honing offerings as well as delivery efficiency. Many insurers can be expected to try and expand their contribution in the ecosystem.

iii. Blurred industry boundaries

Even as insurers face competition from up/downstream players, opportunities are arising for them to reinvent customer relationships by providing an ecosystem of services beyond traditional products.

Businesses that once seemed disconnected are now fitting together seamlessly and unleashing surprising synergies. The changing forces allow every sector to redraw its borders with wider product and service offerings and customer ownership as the ultimate prize.

Digital connectedness is blurring industry boundaries, creating opportunities to extend across ecosystems. An ecosystem-based approach involves offering a holistic set of interconnected products/services related to a given dimension of someone’s life, e.g. home, wealth, mobility or lifestyle.

Insurance at the centre of a new ecosystem

iv. Rise of FinTech/InsurTech

Incumbents need to understand how they can leverage InsurTechs as enablers and partners to enhance the customer offerings, increase their customer base and drive operational efficiencies.

From the Industrial Age to the Information Age and the present Digital Age, technological innovation has been the backbone of progress while complemented by competition and other key factors that influence new business and economic trends. InsurTech/FinTech are sources of competitive advantage to:
1.3 Comparison with the global landscape

The Indian insurance sector is underperforming compared to that of developed and emerging economies. Insurance penetration and density, which are the key performance indicators of the insurance industry, are especially low in India. Further, there is a significant gap between insurance coverage and value, which highlights the high risk state of country. Since these vital parameters are improving at a stagnant growth rate, there is a long way to go.

Insurance penetration, which is measured as the ratio of insurance premium paid and GDP of the country, has increased from 2.71% in 2001 to 3.69% in 2017 in India. Although this is significant development considering the volume of business, it lags behind the global (6.13%) and Asian figures (5.62%).

Insurance density indicates the coverage of the population of a country and is calculated as the ratio of total insurance premium paid in a year to the population of the country. Insurance density has shown steady growth in the past and has improved from USD 11.5 in 2001 to USD 73 in 2017, but it still lags behind the global (USD 650) and Asian figures (USD 360).
Our survey of customers, agents and insurers explored how the entire insurance customer ecosystem in India is changing as a result of emerging trends and evolving customer needs and expectations.

2.1 Technology adoption in the Indian insurance ecosystem

Our discussion with customers revealed eight significant insights.

2.1.1 Preferred purchase mode for insurance

In the Indian landscape, insurance is still a push business and is considered as a complex product for which customers rely on face-to-face interaction for better understanding of the product’s features and pricing. This is apparent from the survey responses, where around 55% of customers still prefer to buy insurance products from agents/brokers and the conversion rate from the online mode is just around 4%.

Further analysis was conducted to identify the dimensions that influence customers to engage with a particular mode. On an average, convenience appears to be the primary reason, with 41% of the respondents choosing a particular mode of insurance purchase based on it. Direct approach by an agent comes next with 20% of the respondents selecting it.

Preferred mode of insurance purchase and reasons for it
2.1.2 Preferred source of valuable information to plan for purchase

In general, feedback matters a lot with respect to not just getting recurring business but also converting prospects into customers. The survey also revealed that word of mouth is a significant channel (27% of the respondents) for spreading information crucial to purchase planning.

Digital modes (47%) are the most preferred and reliable channels leveraged to seek authentic information and verify the information received from other sources, including family, friends or agents. Also, online aggregators (20%) are becoming an integral part of the value chain and their preference score is almost on par with that of company websites as a valuable source of information.

**Most valuable source of information**

<table>
<thead>
<tr>
<th>Digital mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company website</td>
<td>18%</td>
</tr>
<tr>
<td>Online aggregator</td>
<td>20%</td>
</tr>
<tr>
<td>Financial blog/portals</td>
<td>9%</td>
</tr>
<tr>
<td>Agent</td>
<td>22%</td>
</tr>
<tr>
<td>Family/friends/relatives</td>
<td>27%</td>
</tr>
<tr>
<td>Others</td>
<td>3%</td>
</tr>
</tbody>
</table>

0% 5% 10% 15% 20% 25% 30%
2.1.3 Communication channel for existing insurance

Customers still consider agents (32%) as the preferred medium for any kind of communication on their existing policy, even after the purchase of insurance; the next preferred channel is the company website (20%). This indicates the importance of human touch in the Indian insurance ecosystem even in the digital era. Although aggregators are becoming an integral part of the entire value chain, their role is minimal once the customer graduates to the next phase of insurance servicing.

Emerging technology (such as chatbots) has already started picking up as the customer’s first point of contact. It has the potential to expand to multiple phases of customer engagement.

Though smartphone adoption in India has grown at a rate of 19.43% during the period 2015–18 and is expected to grow by 7.60% by 2022, in the case of insurance, the adoption of apps is still at a nascent stage. This can be attributed to limited awareness and lack of simple versions.

Most preferable and primary channel

<table>
<thead>
<tr>
<th>Channel</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital mode</td>
<td>49%</td>
</tr>
<tr>
<td>Meet/call an agent</td>
<td>32%</td>
</tr>
<tr>
<td>Emails</td>
<td>18%</td>
</tr>
<tr>
<td>Letters</td>
<td>1%</td>
</tr>
<tr>
<td>Any third party (including aggregators)</td>
<td>9%</td>
</tr>
<tr>
<td>Insurance company’s website/portal</td>
<td>20%</td>
</tr>
<tr>
<td>Online chat on insurance company’s website</td>
<td>13%</td>
</tr>
<tr>
<td>Insurance company’s social media page</td>
<td>3%</td>
</tr>
<tr>
<td>Insurance company’s apps</td>
<td>5%</td>
</tr>
</tbody>
</table>

Digital mode = Third party (including aggregators) + website/portal + online chat + social media page + apps

Source: PwC India’s Insurance Technology Adoption Survey 2019

2.1.4 Customers’ preferred platform for interaction

Although customers are more open towards digital media, they still expect human interaction for critical communication.

The analysis of customer expectations regarding future interaction during the customer lifecycle suggests the following key trends:

- For product-like insurance, customers still prefer active human interaction to understand the nuances of all the phases, especially at the pre-purchase and claim stages.
- The role of digital is comparatively higher than that of the agent/broker during purchase and service.
- Interestingly, 41% of customers would prefer human interaction over the online mode while planning a purchase.
- Assistant/chatbots are the preferred interaction medium only during the service period.

### Customer-preferred platform for interaction

<table>
<thead>
<tr>
<th>For understanding the insurance terms/benefits/limitations/cost</th>
<th>For insurance purchase</th>
<th>For service-like queries, complaints and account details modification, etc.</th>
<th>For insurance claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct call to agent/customer care</td>
<td>Mobile app/web portal</td>
<td>Mobile app/web portal</td>
<td>Direct call to agent/customer care</td>
</tr>
<tr>
<td>Email to agent/customer care</td>
<td>Virtual assistance/chatbots</td>
<td>Virtual assistance/chatbots</td>
<td>Email to agent/customer care</td>
</tr>
</tbody>
</table>

Source: PwC India’s Insurance Technology Adoption Survey 2019
2.1.5 Digital and social media behaviour of insurance customers

Social media adoption is growing across geographies, age groups and mindsets. Customers in general are impacted by social media on a daily basis and these channels can’t be neglected by any businesses today. It is interesting to know how insurance customers are embracing social media and the key uses of social media which are relevant for insurance providers.

i. Opinion matters most while planning to engage with the insurer
   1. As per the survey results, around 44% of customers prefer to seek the opinions of others while choosing an insurance product.
   2. 67% of customers prefer to leverage aggregators/online platforms which enable them to make calculated and informed decisions by comparing products.

ii. Limited customer engagement on social media
   3. Social media penetration in India is quite extensive, with 55% of active Internet users having a social media presence.\(^9\)
   4. Approximately 17% customers are using social media to stay up to date with the latest trends. Further, 5% actively engages in discussion on topics of interest on social media, while 70% have never participated in such discussions.

iii. Limited word of mouth on digital platforms
   4. An interesting finding from our survey was that 70% of customers have never shared their positive or negative experiences related to an insurance product. However, one-third of them would like to do so in future.

Social media activities of insurance customers

<table>
<thead>
<tr>
<th>Activity</th>
<th>I do most of the time</th>
<th>Never done</th>
<th>Would do sometime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading online reviews</td>
<td>40%</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Comparison with other insurance company’s product</td>
<td>16%</td>
<td>45%</td>
<td>17%</td>
</tr>
<tr>
<td>Using social media to stay up to date with the latest trends</td>
<td>44%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Actively participate on social media on related topics</td>
<td>26%</td>
<td>68%</td>
<td>67%</td>
</tr>
<tr>
<td>Posting my positive insurance service experience</td>
<td>17%</td>
<td>6%</td>
<td>16%</td>
</tr>
<tr>
<td>Posting my negative insurance service experience</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: PwC India’s Insurance Technology Adoption Survey 2019

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2.1.6 Likelihood of switching to another insurance provider based on experience with the insurer

When asked about the satisfaction level with their existing insurance provider, a majority of customers seem satisfied and are not likely to switch their insurance policy in the near future. Approximately 5 out of 10 customers are satisfied with their current insurer, while 3 out of 10 customers are neutral. Approximately 2 out of 10 are looking to discontinue their current insurer and switch to another. This level of stability might be attributed to the non-occurrence of critical stages like claim for most of the respondents.

Satisfaction level and likelihood of switching insurance policy

![Satisfaction chart]

Source: PwC India’s Insurance Technology Adoption Survey 2019

2.1.7 Challenges at the customer lifecycle stages

In the insurance business, interaction between the customer and insurer is usually limited compared to that in other businesses. These occasions should be considered as critical moments as the customer can make or break the relationship based on such interactions. In this study, we tried to understand the challenges faced by customers at these critical moments in various phases of the customer lifecycle.

1. Purchase stage: Customers find it difficult to understand policy terms and features while purchasing an insurance policy. Policy terms are complex and lengthy, which makes them difficult to comprehend. Some customers pointed out basic customer engagement related challenges like pushing irrelevant products and lack of trust.

The top three areas which demand the attention of insurers are:

- 57% of the customers face challenges related to understanding of policy benefits, pricing and coverage.
- Customer relationship related challenges like lack of trust and forced selling are faced by 23% of the customers.
- Non-alignment of policy features/benefits with their needs was one of the key challenges pointed out by 15% of the customers at the purchase stage.

2. Service/claim stage: At the service and claim stages, out of all the challenges faced by customers, 47% are relationship-related issues as interactions and processes are not easy to deal with. Also, paperwork makes the process lengthy and complex. Further, 35% of the challenges are related to responsiveness during claim processing.

Challenges faced by customers during engagement lifecycle

![Challenges chart]

Source: PwC India’s Insurance Technology Adoption Survey 2019
3. **Closure stage**: At this stage, customers deal with multiple representatives and have to explain the reasons for their action each time. This is a major inconvenience for customers. Approximately 45% of the challenges are of this type at the policy closure stage. Issues related to inadequately defined processes for closure come next, with customers finding processes lengthy and cumbersome due to the involvement of manual paperwork. Approximately 18% of the issues are related to lack of transparency in charges imposed during closure.

2.1.8 **Customer expectations from insurance providers**

The gaps highlighted by customers are basic in nature and can be improved by adopting some new practices and correcting some of the existing processes. The overall analysis of customer expectations reveals the following key theme.

### Customer expectations from insurers

<table>
<thead>
<tr>
<th>Customer</th>
<th>Digitisation</th>
<th>Customer centricity</th>
<th>Personalisation</th>
<th>Simplicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitisation</td>
<td>Go digital by reducing human-centric processes</td>
<td>Evaluate initiatives and investments from customer experience perspective</td>
<td>Connect with customer with personal touch and relevant interactions</td>
<td>Ensure simple processes and better awareness of terms and benefits</td>
</tr>
</tbody>
</table>

Moreover, innovation, if deployed towards simplification of processes, will prove to be a game changer for the insurance industry. The main barrier towards simplification is the traditional mindset around processes which finds comfort in redundant activities like multi-level approvals, physical verification, physical documentation, manual intervention and siloed systems. Simplification of processes can be achieved by questioning each and every step involved in a process and re-engineering it by leveraging technology such that it becomes simple, faster and less error prone. An optimum mix of human and machine intervention should be evaluated by keeping customer experience at the core of the objective.

**ii. Digitisation**

Digitisation of services in India has elevated the expectations of customers in general. The rapid rise in social media usage, increase in number of smart devices, availability of on-demand services and improved information security have made customers in India more connected and vocal about their needs.

For insurers, digitisation of sales processes has always been the top priority. Although there has been significant investment and innovation in this area, re-evaluation of post-sales processes is vital for alignment with the needs of digitally advanced customers. Online self-service, easy communication channels, acceptance of digital documents, online processes for claims and other requests and flexibility in accessing account are the basic services expected. Further, elimination of paperwork through strategic digitisation of business processes will provide huge relief to customers.

It is important to note that initiatives taken by insurers are focused on digitising processes rather than digitally transforming them. The latter essentially requires re-assessment of the processes and elimination of non-value adding activities while reducing human intervention to the minimum.

> “Digital enablement is a journey; and while a few elements to build operational efficiency are already underway – e.g. paperless transactions – the leapfrog impact for insurance businesses would be felt once internal approaches and processes are realigned to deliver simpler, more effective and targeted solutions.”

**Kolla Suresh, Head, IT and OPS**

Religare Health Insurance Co Ltd

**Source**: PwC India’s Insurance Technology Adoption Survey 2019
iii. Customer centricity
In the Indian context, insurance is still a push product where selling is done by reaching out to the customer. In such an ecosystem, insurers give more consideration to intermediaries rather than the end customer. Further, interaction between insurers and customers is less frequent and, as a result, insurers have limited data about customers.

Insurers need to raise the standard of customer engagement processes to prevent situations like interactive voice response (IVR) loops, interaction with a chain of representatives, and a siloed view of customer interactions, transactions, and requests, etc. Creating a vibrant ecosystem around customers through tie-ups with fitness devices, social media connections, suggestions on complementary offers, financial dashboards, digital repository and health monitoring will generate more interaction touchpoints and could drive better customer relationships.

iv. Personalisation
The insurance market of the future is destined to be intensively driven by technology and personalisation. To cultivate a personalized approach, insurers must utilise the available data on customers. Currently, customer data usually exists in non-integrated multiple systems. A connected technological architecture can assist in providing a holistic view of customers to executives for better interaction. Further, consolidation of customer information has the potential to drive deep insights into customer behaviour. Customer persona analysis can help an executive to customise approaches as per the individual customer type. It will ensure that interactions are personalised and relevant to customers. Improvisation of interaction touchpoints can lead to frequent meaningful and personalised interactions.

2.2 CXOs’ experiences
As part of PwC India’s Insurance Technology Adoption Survey 2019, we also asked CXOs about their experiences related to customer-oriented capabilities, InsurTech, social media and emerging technologies.

2.2.1 Key business challenges related to customers
From a customer’s perspective, the key reasons for insurance purchase in India are tax incentives and compliance mandates:

• Low customer awareness related to the need for and amount of insurance cover required is a leading concern of insurers. It is common for prospects and customers to compare life insurance with other available investment options.
• Poor understanding of insurance policy terms and features usually results in wrong purchase and later into customer churn, which impacts the revenue of the organisation.

“Two of the biggest challenges that the industry is facing today are a higher cost of acquisition (due to factors such as high cost of distribution models and marketing cost) and mis-selling (due to lack of understanding, low awareness), which lead to people not fully understanding the product features and buying insurance just as a short-term investment. The industry will have to work jointly to ensure that awareness about life insurance solutions reaches across all segments of the population through consistent and regular communication with customers.”

Anuj Mathur, MD and CEO
Canara HSBC OBC Life Insurance Co Ltd

“‘We don’t see InsurTechs as a threat to the business, though they operate in the same space and can move through the value chain at any point in time. It’s more like collaborators in solving business problems.’”

Mayank Bhargava, CIO
DHFL Pramerica Life Insurance Co Ltd

Source: PwC India’s Insurance Technology Adoption Survey 2019

• Long and manual business processes are among the top concerns of senior management in the insurance industry. CXOs admit that customer expectations are higher and their own processes need to be aligned judiciously. Interestingly, our survey revealed that CXOs believe that the Aadhaar card has been a great enabler of KYC initiatives in India.

2.2.2 Enhancing customer-oriented capabilities
Customer acquisition is the top priority area from the investment and innovation perspective. Most of the CXOs have a clearly defined roadmap to enhance their customer acquisition performance. This is followed by improving self-service capabilities for customers. One of the noticeable trends is that insurers are building capabilities around customer experience where the interface design, appearance, process flow, click count and overall completion time are considered for designing services.

Source: PwC India’s Insurance Technology Adoption Survey 2019
2.2.3 Evolving role of InsurTechs
Most of the CXOs don’t recognise InsurTechs as an immediate business threat. In their opinion, InsurTechs are solving specific problems related to customers and distribution channels and may be good candidates for collaboration in certain cases. Almost all CXOs agreed that they have started working on proofs of concept (PoCs) with InsurTechs or are in the process of evaluating business cases for collaboration with InsurTechs. They also agreed that building their own capabilities around InsurTech will be beneficial in the long run.

As InsurTechs don’t have a legacy burden and are born digital, they have the potential to disrupt the market. However, the lack of insurance expertise will force them to coexist and depend on insurance companies.

2.2.4 Embracing technology as an enabler rather than a disruptor
Since privatisation of the insurance sector in early 2000s, the ecosystem of the insurance business in India has changed dramatically. Private insurers have increased their share of the pie significantly by capitalising on the favourable economic, social and technological scenario in India. The growth of the customer base has been marked in certain geographical, social and economic pockets within India.

Insurers are embracing technology as an enabler rather than a disruptor to cater to customers and set up robust infrastructure for innovation and continuous improvement.

2.2.5 Social media – still marginalised
At present, given that digital devices are indispensable, industry has acknowledged that the role of social media will be instrumental in future and it could become a key platform for distribution. However, currently, the role of social media in the insurance sector is still at a nascent stage, with its use being primarily limited to that as a platform for customer complaint and grievances.

With the rising digital population, insurers are optimistic about the development of social media into a direct touchpoint and as a tool for raising awareness. Some of the CXOs mentioned that their organisation is actively present on social media to generate awareness about their insurance products, to advertise and to achieve customer delight.

2.2.6 Expectations from the insurance regulator
The position of the regulator is perceived to be reformatory by industry leaders in India, with decisions having been taken to protect customer interests and bring in transparency in processes and pricing to regulate the industry efficiently. However, CXOs have highlighted the following areas where support of the regulator and the government will improve the business scenario and customer benefits:

- Simplify customer engagement processes by eliminating non-value adding steps.
- Digitisation and integration of systems can enable faster processing and reduction in human error. For example, death records, if available online, will reduce the overall claim settlement time period by eliminating human-based processing.
- Cost of operation can be reduced by creating labelled data and adoption of digital processes by government agencies. A common repository for health records across the country will help in the verification of medical history and claim processing.
- A lot of paperwork is still involved in terms of thick policy dockets and terms and conditions (T&Cs) in fine print. The industry is looking at more e-facilities which will help insurers by increasing transparency and simplify purchase of insurance for customers.

“Social media is still not being used to its full potential and is primarily working just as a grievance redressal mechanism instead of a platform or source for getting more leads. On the initial construct of connecting people together, it has the potential to connect insurance availability with needs and create value for business.”

Ashish Mittal, Head of Digital Technology
Apollo Munich Health Insurance Co Ltd

Source: PwC India’s Insurance Technology Adoption Survey 2019
2.2.7 Encounters with emerging technologies

In the last few years, technologies like artificial intelligence (AI) and robotic process automation (RPA) have matured significantly and have begun to be adopted in the mainstream to enable business to keep pace with growth.

With valid business cases in back-office operations, RPA has become a standard technology across industry players. Insurers have already started using chatbots in the initial stages of customer interaction. After a point of time, it can be utilised in end-to-end interaction with customers, with minimal human assistance. Within the limited legal boundaries of the data privacy and protection framework in India, insurers have started evaluating use cases related to the Internet of things (IoT), especially in the area of wellness. Insurance companies can leverage IoT for providing wellness facilities to customers by collaborating with wellness companies.

2.3 PwC’s perspective on technology adoption

As per PwC’s recent Global Digital IQ Survey, innovation in India is driven more by industry and competition and less by customer insights.10 Also, in the Insurance Technology Adoption Survey 2019, CXOs indicated that they are focusing on building capabilities and launching new initiatives from a customer engagement perspective.

Insurers must understand that evolving customer dynamics demand the set-up of multiple direct relationship touchpoints with customers. Dependence on indirect touchpoints via distribution channels makes relationships vulnerable and will not be sufficient in future.

It is now important for insurers to focus on customer relationships as this will be a key determinant of sustainable market success.

2.3.1 Channelise readiness for better customer relationship

Insurers may have their own understanding of customers and some planned acceptable approaches for building relationships with customers. However, some basic groundwork needs to be carried out while envisaging large transformations and starting investments.

Collect

Collection and digitisation of customer data is the first step. If required, digitise historical customer data. What data should be digitised is decided based on the dimensions of current and future analysis requirements. Lack of customer data is an indicator of poor customer relationship and negligence towards customers.

Cleanse

Keep customer data clean and up to date before inferring any insight for decision making. Insurers must identify opportunities to capture customer information as reaching out to customers exclusively for information will require effort and manpower. However, adopting certain practices during customer interaction may be useful.

Understand

Understand customer’s information like age, gender, region, language, distribution channel, insurance type, customer income group, customer digital literacy level and social media presence. This will help in creating personas of each customer. Leverage 360° view of customer in each interaction for assistance in queries and complaints.

Strategise

Understand dependencies on distribution channels, underserved regions, language barriers and digital maturity for preparing strategies to improve customer experience. An analytics solution can help in analysis of customer data and provide inputs useful in product designing, sales and marketing, and distribution channels for better customer services.

Compliance

Ensure that the data collection and management strategy comply with regulatory requirements. In India, the IRDA has mandated that insurance companies store all critical customer data within India. This regulation has implications for customer data management practices.

Source: PwC research
i. Useful customer data collection techniques:

- **Customer enquiries/logins**: Capture and validate basic customer details when a customer or prospect reaches out to company representatives for queries or logs into the mobile application/website.
- **Policy claim/complaints**: Validate essential details and collect missing details like contact number, address, email ID, government-issued identification number, etc. Maintain a history of complaints and resolutions.
- **Redemption of offers and rewards/referrals**: Capture details related to profession, leverage network of family and friends, and understand lifestyle. Such information may be useful in product proposition and cross- and upselling.
- **Policy closure**: Policy closure by a customer is a moment of truth for the insurer and must be dealt with. It is essential to know the reasons for closure and understand the change in requirements. As a result, the insurers may discover new customer behaviour patterns and changes in expectations.
- **Data governance**: Work on establishing a data governance framework and define key performance indicators to evaluate its effectiveness.

ii. Move from a transactional to a meaningful relationship

A key challenge for insurers is to establish a meaningful and direct connection with customers. Some initiatives that can help in building a bridge between the customer and insurer are as follows:

1. Sensitise brokers and agents to deliver a standard and unified customer experience by adopting digital technology and recommending relevant products while collecting customer insights to build better connections.
2. Position relevant allied services along with offerings to have frequent communication and avoid the risk of a few decisive communications with the customer.
3. Evaluate the possibility of role evolution from risk assessor to risk mitigator. Insurers can think of innovative methods to incentivise customers for following a better and low-risk lifestyle.
4. Consider social media monitoring to listen to customer sentiments on social media platforms.
### iii. Reform actions

Based on customer expectations and challenges faced by them during the various lifecycle stages, insurers can decide on reform actions:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Challenges</th>
<th>Useful techniques</th>
<th>Technological capability required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-sale</strong></td>
<td>1. Difficulty in understanding insurance product features, benefits, terms</td>
<td>1. Prepare simplified videos and documents in local languages on product features, benefits and terms to be displayed/made available to customers during the pre-sale stage for a unified experience and building trust.</td>
<td>1. High availability of content over website and mobile app</td>
</tr>
<tr>
<td></td>
<td>2. Customer engagement issues like trust, mis-selling and fitment</td>
<td>2. With the help of the broker/agent, capture customer details to build personas and assist brokers/agents in proposing relevant products.</td>
<td>2. Content management system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. High availability of content over website and mobile app</td>
<td>3. Multilingual website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Content management system</td>
<td>4. UX-rich website/mobile app for data input by customers, agents and brokers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Lead management</td>
<td>5. Lead management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Analytics solutions</td>
<td>6. Analytics solutions</td>
</tr>
<tr>
<td><strong>Service period</strong></td>
<td>1. Complex and lengthy process for queries and complaints</td>
<td>1. Improve complaint-handling process with minimal steps and waiting period on IVR</td>
<td>1. Service management</td>
</tr>
<tr>
<td></td>
<td>2. Timely renewal of policy</td>
<td>2. Email/SMS reminders with embedded payment link for policy renewal</td>
<td>2. 360° view of customer</td>
</tr>
<tr>
<td></td>
<td>3. Irrelevant communication and communication gap</td>
<td>3. Reward loyalty</td>
<td>3. Artificial intelligence for automated personalised email communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Communicate relevant and personalised messages to customers</td>
<td>4. Analytics for persona creation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Create persona for deciding approach rather than direct up-selling communication</td>
<td>5. Chatbots for trivial queries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Provide online self-service facility</td>
<td></td>
</tr>
<tr>
<td><strong>Insurance claim</strong></td>
<td>1. Lengthy process with long waiting period</td>
<td>1. Assign dedicated executive for each claim request. Communicating the turnaround and resolution time will help in building trust</td>
<td>1. Integrated ecosystem for minimal data entry and processing</td>
</tr>
<tr>
<td></td>
<td>2. Paper-based process</td>
<td>2. Provide a 360° view of the customer to executives for better customer handling during service and claim</td>
<td>2. Workflow-based online self-service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Rely on multiple communication channels to reach customer, i.e. primary and secondary mobile, email ID, postal mail, etc.</td>
<td>4. RPA-enabled claim processes</td>
</tr>
<tr>
<td><strong>Policy closure</strong></td>
<td>1. Long waiting period</td>
<td>1. Provide a 360° view of the customer to executives to know the customer history and past issues/resolutions</td>
<td>1. Workflow-based online self-service</td>
</tr>
<tr>
<td></td>
<td>2. Transparency in charges</td>
<td>2. Simplify policy closure process with defined timeline</td>
<td>2. Customer account management for a unified view of customer history communication and transactions</td>
</tr>
<tr>
<td></td>
<td>3. Relationship issues</td>
<td>3. Communicate/facilitate access to key terms and applicable charges throughout the engagement lifecycle</td>
<td>3. Document management system</td>
</tr>
<tr>
<td><strong>Lapsed</strong></td>
<td>Unavailability of contact details with insurer</td>
<td>Maintain demographic, communication and policy-related information of lapsed customers. Approach with better alumni plans, offers and relevant allied services</td>
<td>1. Data warehousing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Analytics solutions</td>
<td></td>
</tr>
</tbody>
</table>
Based on the technology capabilities suggested above, PwC has designed a reference architecture at different levels of abstraction that can be leveraged to target specified areas with the help of technologies.

**Reference architecture for insurance company**

<table>
<thead>
<tr>
<th>Customer service delivery channels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Website/portal</td>
<td>Mobile apps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product management</th>
<th>Marketing, sales and channel management</th>
<th>Customer management/customer service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product strategy, planning and execution</td>
<td>Marketing strategy, planning and execution</td>
<td>Sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core operational value chain services</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent/broker administration</td>
<td>Rating</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enterprise and support services</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk management</td>
<td>Human resources management</td>
</tr>
<tr>
<td>Rules management</td>
<td>Master data management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service orchestration and integration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business process management</td>
<td>Enterprise service bus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service orchestration and integration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Security management</td>
<td>System and database management</td>
</tr>
</tbody>
</table>

Source: PwC research
2.3.2 Technology drivers: Building a bigger ecosystem

The front end of the insurance value chain, i.e. customer acquisition and support, has been majorly impacted by the technological shift. This impact has also trickled down through the entire value chain through the operating model. As a result, digital transformation becomes necessary to keep pace and achieve scalable, sustainable outcomes along with the flexibility and adaptiveness to achieve them.

**Technology essentials for delivering better customer experience**

<table>
<thead>
<tr>
<th></th>
<th>Robust architecture framework</th>
<th>1. Robust architecture framework: For a dynamic environment, a flexible and robust architecture is required. Integration with the components of the growing ecosystem and the capability to incorporate regulatory/business changes will be the key to stay ahead of competition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Seamlessly integrate internal and external ecosystem</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Advanced collaboration tool</td>
<td>2. Advanced collaboration tools: Customer executives need to be equipped with these tools to communicate easily and effectively within the organisation. Usually, such tools include video, voice and chat facilities along with document sharing.</td>
</tr>
<tr>
<td></td>
<td>Engage customers on preferred channels</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>Unified platform</td>
<td>3. Unified platform: To deliver service on a real-time basis, executives must have multi-system information available to them on a single platform. Creation of such a unified platform includes integration of various data systems and creation of data presentation models.</td>
</tr>
<tr>
<td></td>
<td>Improve customer and partner experience</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>Omnichannel experience</td>
<td>4. Omnichannel experience: While insurers are focusing on multiple channels and platforms to engage customers and prospects, it becomes important to ensure that the quality across channels and platforms is maintained at the optimum level.</td>
</tr>
<tr>
<td></td>
<td>Enhance multichannel distribution strategy</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>Insight-driven persona building</td>
<td>5. Insight-driven persona building: Analytics tools can be leveraged to drive insights from customer history and behaviour. These tools may integrate data from internal and external systems. Based on the insights obtained, customer personas can be developed and strategies to serve/sell better can be planned. Further, predictive analysis may help executives to identify customers who are likely to default on payment or terminate the policy.</td>
</tr>
<tr>
<td></td>
<td>Become a data-driven enterprise for targeted customer offerings</td>
<td></td>
</tr>
</tbody>
</table>
2.3.3 Emerging technology ecosystem

In the digital era, the insurance industry is taking advantage of powerful analytics and the social cloud. In addition, privacy issues are being treated with due importance when dealing with tech-savvy customers. The emerging technologies have revolutionised the insurance industry by solving long-standing customer issues, and InsurTechs have had a deep and lasting and systemic impact on the industry.

At the top of the reference architecture shown in the previous section, there are some use cases which are gaining traction as per our discussion with insurers (CXOs/higher management):

Illustrative use cases to enable customer experience and innovation initiatives

![Diagram showing use cases](source: PwC research)
The latest emerging technologies that are helping businesses to offer a promising experience are:

i. IoT

The global network of sensor-enabled, connected devices has the power to transform and truly disrupt the insurance industry, though it comes with some of its own challenges. The ability to access customers’ behavioural data using IoT without intervention by traditional agents is a new phenomenon. As the adoption of technology by insurers and customers increases, data generation through millions of devices connected to the Internet will surge and the role of IoT will grow accordingly.

Illustrative use cases of IoT technology across the globe:

1. A US car insurer is using a usage-based insurance technique to reward safe drivers with reduced premiums by monitoring driver performance using telematics. Such models help in linking risk and pricing.

2. In another case, a leading insurer partnered with an Internet giant to implement smoke alarms in homes that will help customers in reducing fire risk and thus reduce the premium of home insurance.

3. In the area of health, an insurance and investment company distributed health-monitoring devices to customers that allow them to track their health parameters and well-being. The customer gets incentives to stay fit and, as a result, the chances of claim filing reduce. Incentives are given by offering discounts and entertainment and travel rewards.
State of IoT technology in India

Although IoT adoption in insurance is on the rise globally, in India, it is still in the early stages. The insurance regulator in India has evaluated the use of wearable/portable devices in the insurance industry. The findings and recommendations of the working group highlighted IoT as the most important technology that needs to be assessed from the regulatory standpoint. The study indicated that owing to awareness and concerns about the safety of personal data, IT regulations could focus on data privacy and security. It also recommended that insurers may design solutions around wearables that can be used throughout the customer lifecycle to help in creating relevant market propositions and customer experience.

Further, India’s Health Insurance Regulations, 2016, allow insurers to reward customers on the basis of health and fitness parameters. Accordingly, some insurers have introduced fitness features related to customers’ overall health. However, challenges in the Indian insurance ecosystem have prevented insurers from fully leveraging IoT technology and passing on benefits to customers.

ii. Artificial intelligence

Though the fundamental purpose of applying AI in insurance is to identify patterns in data and predict outcomes, thus helping to calculate premiums, the industry on the whole is on the verge of a monumental technology-driven shift.

Insurers are already leveraging advanced analytics to explore structured data, and AI now makes it possible to analyse unstructured data (e.g. images, videos). Further, its ability to understand historical data patterns and predict outcomes is continuously fine-tuned.

A majority of insurers have focused on implementing AI to automate repetitive tasks to reproduce known answers. Application of core AI technology can be largely classified into four different categories (see figure alongside).

Examples of AI

An insurance company revamped personal injury claims process using AI, and claims that it has saved 40,000 work hours while reducing claim processing time from 58 minutes to five seconds per medical report.

An Indian insurance company launched a chatbot to underwrite fire, burglary and two-wheeler insurance for SMEs. The company claims that the chatbot has sold more than 750 policies without any human intervention and engaged in more than 65,000 customer interactions.

Another insurance company has established a dynamic ‘pay-per-mile’ underwriting system using an AI-based device installed on the vehicle to monitor miles, jerks, collisions, speed patterns, etc. This data is used to calculate insurance premium.

An Indian health insurance company has deployed AI’s predictive algorithms, leveraging the past year’s claim activities and hospitalisation data to offer wellness benefits that encourage customers to stay healthy.

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According to our survey, customers believe that companies use jargon (e.g. term life versus whole life insurance) which is difficult to comprehend. Chatbots will not only serve customers round the clock but also streamline tedious processes and break down complex language into more straightforward terms, thereby providing a smooth experience to new customers.

In the present scenario, the biggest benefit from AI technology is enhanced customer experience along with improved fraud detection as well as streamlined back-office processing through automation of labour-intensive and tedious business processes. One of the most popular AI applications in insurance is claim-handling process automation. Furthermore, AI can empower key processes such as asset management, claim analysis, risk calculation and prevention. As intelligent bots are replacing humans, AI is poised for greater growth with the increasing smartphone user base and digital trends.

iii. Blockchain

Decentralised ledger technology helps in bringing all parties on one common platform while simplifying the quote and claim processes. Blockchain can disrupt the existing business models in several ways:

- Minimal chances of identity theft as it ensures that digital data is safe
- Automation of existing time-consuming processes of identity validation, etc., reducing administration costs while improving customer experience
- Easier and faster claims processing by authenticating transactions, policies and customers using smart contract technology along with efficient underwriting and risk trading

Blockchain is still a new technology and it needs to be fully understood and explored. Thus far, the insurance industry has been embracing a ‘wait and watch’ approach due to uncertainty around whether or not blockchain can provide any differentiated value. However, a recent PoC completed by PwC for Lloyd’s of London offers an example of the application of the distributed ledger technology application and its potential.12 In future, many more use cases may arise:

- Title insurers could obtain information more easily at a lower transactions costs by registering real estate records on distributed ledgers.
- A life insurance smart contract can release funds immediately to the beneficiary upon verification of a policyholder’s death.
- A smart insurance product can trigger a crop insurance payout by linking to a real-time weather data source if the amount of rainfall drops below the level in a certain area.
- A policyholder’s smartphone location feature can trigger a smart contract for collecting premiums of travel insurance plans when a person is travelling.
- Premiums can be collected by linking smart insurance contracts to vehicles based on driving habits of owners.

Challenges to the adoption of emerging technologies in India

1. Burden of legacy ecosystem: The burden of a legacy partner ecosystem can limit progress. Lack of an electronic health record repository across the country makes the risk assessment process challenging. Currently, insurers collect customer health data at a particular point in time through medical tests or self-disclosure by customer which makes the risk assessment process inefficient.

2. Disruption of the existing business model: The usage-based model primarily focuses on giving benefits to customers. This situation is likely to be overturned when margins start shrinking. Further, once insurers start penalising customers under this model for poor or risky living standards, they may have to face questions related to transparency and rights for using customer personal data.

3. Return on investment: Set-up and operationalisation of infrastructure for emerging technology includes additional cost factors like specialised equipment, a connected ecosystem of sensors/equipment, data digitisation and cleansing, subject matter experts, analytics/AI/IoT software, and skilled manpower for running operations and security compliances. Considering the elevated cost of emerging technology, demonstrating return on investment over a period of time will be difficult for insurers.

4. Consumer adoption: Although digital adoption is on the rise in India, the adoption of insurance-related technology will be a challenge. This may be attributed to the higher cost of health/fitness monitoring devices, home monitoring devices, telematics, etc. Further, building consumer trust in IoT will take time. A pure usage-based model may give rise to conflict in the absence of transparency and lack of trust in monitoring devices.

5. Data privacy and security: Emerging technologies usually deal in customer data which can be used to drive insights related to historical health issues and behavioural patterns of customers. Increasing regulations related to customer personal data around the globe and in India will continue to pose additional challenges.

6. Interoperability: The need for reliable platforms and robust procedures will increase in tandem with the adoption of emerging technologies. Technology providers, insurers and regulators will have to devise and agree on various standards like data standards, hardware standards, security standards, installation practices, power management and protection standards, upgrades and fault diagnostics for interoperability.

The above challenges are widespread in the Indian context and will determine successful adoption by customers and insurers.

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Whenever customer friction intersects with untapped profit potential, disruption is bound to occur.

In order to be ‘fit for growth’, insurers will need to be able to compete on price while keeping pace with the disruptive developments in the marketplace. Embracing the digital transformation can make pricing more precise and align it with risk selection. It can also deliver more tailored and targeted customer solutions at a fraction of the cost.

Although the Indian insurance industry has grown exponentially over the last decade, there are opportunities for further growth. Growth not only comes from customer focus and market offerings but also from better capabilities – all of which require ongoing investment. Squeezing a bit of savings from slow and unfocused operations isn’t going to be enough for a company to sustain itself in this disrupted competitive marketplace. The insurance sector has yet to plan a consistent approach to disruption and executives need to think forward, putting innovation at the heart of strategies and then detailing to what extent the technology ecosystem can be leveraged.

PwC’s framework for emerging technologies adoption

To proactively respond to the changing business environment and evolving customer needs, insurers can follow PwC’s recommended systematic approach for the adoption of advanced technologies, which helps in tackling the challenges related to the transformation journey.

PwC’s framework for emerging technologies adoption maps out the entire journey for an insurer, including business case preparation for initiating technology transformation, identification of organisational changes required, building governance, system and data model design, implementation of business case and maintaining operational excellence.

This journey is not only about technology but also about handling internal disruption and managing challenges like workforce complexity arising from the inclusion of robots and dynamic interactions across the insurance value chain.
Bibliography


Survey methodology

As part of PwC India’s Insurance Technology Adoption Survey 2019, we interacted with around 200 customers, agents and insurers (CXOs/higher management) and sought their viewpoints and feedback. In the case of customers, we used a survey-based approach, allowing them to select more than one option for some of the questions to ensure that their expectations are captured in detail. On the other hand, we gathered the views of insurers and agents by engaging in open-ended interactions around the theme of customer evolution.
About CII

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry, Government, and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, playing a proactive role in India’s development process. Founded in 1895, India’s premier business association has around 9000 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from around 276 national and regional sectoral industry bodies.

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.

India is now set to become a US$ 5 trillion economy in the next five years and Indian industry will remain the principal growth engine for achieving this target. With the theme for 2019-20 as ‘Competitiveness of India Inc - India@75: Forging Ahead’, CII will focus on five priority areas which would enable the country to stay on a solid growth track. These are - employment generation, rural-urban connect, energy security, environmental sustainability and governance.

With 66 offices, including 9 Centres of Excellence, in India, and 10 overseas offices in Australia, China, Egypt, France, Germany, Singapore, South Africa, UAE, UK, and USA, as well as institutional partnerships with 355 counterpart organizations in 126 countries, CII serves as a reference point for Indian industry and the international business community.
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