Innovations and Challenges in Finance, Banking and Insurance

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Abstract

In business, innovation often results when ideas are applied by the company in order to further satisfy the needs and expectations of the customers. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need.

Banks, Insurance and other financial services in the worldwide are exploring new technologies and business models that can help them compete in the digital age. From robo advisors and open APIs to blockchain technology, peer to peer lending are the few innovations transforming the banking sector.

The insurance industry is full of hypothetical crystal balls gazing into the future. Predictions of intermediating robots selling policies and human microchips feeding data to blockchain-supported underwriters are two possible innovation in the insurance.

Enhanced spending on infrastructure, speedy implementation of projects and continuation of reforms are expected to provide further impetus to growth. All these factors suggest that India's BFSI (Banking, Financial services and Insurance) industry is also poised for robust growth as the rapidly growing business. However BFSI sector is facing challenges also. One of the most challenges is of demand and supply and services are not reaching to the certain fraction of the population which is rural and doesn't have access to banking thus hindering the growth of BFSI sector.

KEYWORDS: Artificial Intelligence, Digital Transformation, Security.

Introduction: -

Banks and Insurance Companies must create Products and Service that are easy to use, fast and convenient and personalized. Consumer increasingly prefer to do their banking using digital services and to evaluate and even purchase insurance products entirely online. New Technology upstarts and major players, including Apple and Google, continue to challenge traditional processes in Banking and Insurance sector.

With the emergence of new products like Apple Pay and upstart companies like Lending Club, which facilitated over \$13 billion in peer-to-peer loans last year, the unbundling of banking is already underway. Virtually every division of the banking and insurance industry is seeing a crop of new financial technology upstarts dedicated to streamlining areas where traditional banks have long maintained dominance

Innovative technologies in the financial sector are now revolutionizing the banking system. Security features such as the advanced biometrics and cryptography, will help in

securing against bank frauds, and remote applications will make it simpler than ever before to perform the most banking necessities without even reaching a branch.

In this paper, we analyze the various innovations in Finance, Banking and Insurance and also the various challenges faced by them.

Key Innovative Digital Transformation in Finance , Banking and Insurance sectors:-

From recognizable brands to those that are lesser known, many banking and insurance companies create innovation programs using innovation management software to manage ideas and accelerate their innovation pipeline. Not only does the use of this software help manage the innovation process, it breaks down department silos allowing employees to collaborate with each other on new ideas or improve existing ones. Here are some examples of banking and insurance companies who have established innovation programs that spur employee engagement and drive business results.

1. Cloud services will organize banking activities:

The more cloud-based computing gets established, the more pleasure banking sectors will have on applying it. Additionally, SaaS apps are continually improving. As this is happening, main operations of financial services will be sent to the cloud and automated services. As these proceed to happen, the need for individual services in company infrastructures will surely be decreased. Progressive banks are now making progress in cloud selection. Disruptive advances that are changing the presentation of business—the blockchain, Big Data, IoT, artificial intelligence (AI) - will be utilized by applying cloud computing.

2. Artificial Intelligence Will Keep Progressing:

As Artificial Intelligence technology keeps progressing, the capability to offer better and more accounting in real-time with charts and reports with just one click is going to transform the banking industry and the conventional monthly accounting procedures. Everybody wants instant results, not after a week-long wait, and not at all after a month. Although chatbots are the hottest elements of the banking system, it is yet the mind behind the BOT innovators that is allowing the suspension of old customer service in the banking industry. AI has achieved a vital point and will be at the top of a confluence of technologies like the Internet of Things (IoT), Data Science, Natural Language Programming (NLP), Optical Character Recognition (OCR), and Blockchain that will lead the architectural evolution in the way banking sectors work.

3. Mobile Banking Will Be More Effortless:

The mobile banking system is not new, however, will wind up more comfortable to use in coming years and give more usability for customers. It will keep speed in standard banking in customer choice as their user, customer, and digital experiences will get more data-informed and enriched. This will incorporate, customer-to-customer one-click payments, the consumer-to-business effortless digital banking system, password-free biometrics, new crypto currency opportunities, locational administrations and offers, and conversational interfaces. The instance that Apple is getting into direct peer-to-peer

payments will force banks to make their personal mobile contributions more consistent and simpler to use.

4. More Blockchain:

The financial service institutions that comprehend the technique to implement blockchain technology to customer-focused business methods will look forward to acquiring cost and competitive benefits. Software merchants with production ready and pre-built blockchain services will engage prime interest from organizations seeking to fast-track their blockchain strategies and have a head start on combining more cost-efficient innovations into the operations of their firm. Bookkeeping transactions are separated into encrypted packets, called blocks which are at that point added to the "chain" of computer code and encoded for upgraded cyber security.

5. Updated ATMs:

Much the same as Google Wallet or Apple Pay, you'll be able to conduct contactless ATM transactions just using your phone. A few ATM technologies are already accessible overseas. For instance, biometric authentication is already employed in India, and iris recognition is used at Qatar National Bank ATMs. These technologies can enable thorough bank security by securing against ATM hacks.

6. Security Will Become Sturdier:

Security is constantly a worry for financial institutions and will proceed to be in 2018. Banks will increasingly search for approaches to include new levels of protection for their services. According to a prediction by IDC that in 2018, spending will ascend by 20% on cutting-edge security-based authentication techniques, as banks endeavor to strengthen "digital trust" with their consumers. Banks will transfer that to facial recognition and voice prints. As consumers can get frustrated attempting to remember several passwords, biometric authentication approach will assist the security procedures and give safer methods of authentication.

7. Partnerships:

Authorities are understanding that working together with new contestants can enable them to get another viewpoint on their industry, better comprehend their key favorable circumstances, and even externalize parts of their innovative work. Subsequently, we're seeing an increasing number of joint efforts amongst authorities and investors. Also, financial systems can emit a huge amount into technology, the rapid method to convey financial development in the future is likely going to include key partnerships. Regional banks, such as Union Bank in California, are making vital partnerships with commercial moneylenders, giving referrals to clients they can't loan to. This empowers them to meet their customer's prerequisites as well as abstain from the threat that they will depart for a new full-service financial institution.

8.Innovative Banking Products and Services

Mobile banking, NFC Payments, Online financial tools, Social Media Banking, Video chat advisory, etc. are taking Banking services to the next level. These initiatives are making banking services more cost effective and easy to access.

9. Robo advisors:

In the finance sector, robo advisors are already on the market that can handle virtually every aspect of investing. From organizing a customer's debt, tax affairs and financial planning to tailoring investment portfolios, robo advisors are making finance management easier and more accessible. Robo advisors are also catering to a gap in the market – traditionally, expert financial advice has only been made available to the wealthy. Robo advisors can help small investors without the steep cost of face-to-face advice.

10. Open APIs:

Open API models enable trusted partners to build new customer interface layers and innovate new and exciting products and services on top of a financial service provider platform. Open APIs help to foster an ecosystem for banks, software developers and account holders, enabling banks to innovate and extend beyond their traditional service offering. As well as promoting innovation, open APIs also encourage financial transparency – and have been linked to reducing corruption as well as improving trust and accountability.

11.Big data analytics:

Big data analytics is all about exploring the value of data – and from risk and regulatory data management to compliance, banks are doing just that. Customers expect a more personalized service from their banks, and big data analytics is also helping banks to tailor products to the individual needs of their customers.

12.Peer-to-peer lending:

P2P lending directly connects borrowers – including individuals and businesses - to lenders. Using the latest technology, these platforms are popular for their speed and convenience, as well as the fact they often bypass regulation and can therefore offer better rates of interests. P2P cuts out the middlemen: banks and other financial intermediaries. At the same time, however, it can also expose users to greater risk – by lending directly, savers do not get the same protection as putting their money into a bank account.

13. Big data:

Insurers use more and more sources of information to gain a deeper insight into the risk they're covering, has huge benefits. As well as more accurate underwriting and pricing, a deeper understanding of customers can also drive more personalized product development and marketing. Customers are enjoying a much smoother insurance application process. Instead of customers supplying lots of data themselves, insurers can pull details in from other sources, which saves time and reduces hassle, which allows

brokers to spend more time with their customers. But there are challenges to overcome. Insurers need to be confident in the accuracy and appropriateness of the data they use. And, with the General Data Protection Regulation coming into effect in May 2018, there could be challenges on data consent.

14.Internet of things:

With everything from phones to cars and kettles linking to the internet, the insurance sector is set to benefit from this connectivity. As well as enabling the provision of new services, in many areas this will shift the focus from repair to prevention. In the motor space, telematics is already helping insurers understand more about the risks they're covering, while also encouraging better driving habits and improving road safety.

15.Drones:

Drones are delivering huge benefits in claims management. In situations such as fires or floods where it's not possible for a claims adjustor to gain immediate access, a drone can be flown over the property to determine the extent of the damage. As well as resulting in improvements in customer service due to the speed at which this service can be delivered, repairs can also get started much sooner. Drones can also be used for risk assessments, either where elements of a property are inaccessible, for instance the roof, or to provide underwriters with a view of the area so they can assess a range of risk factors. Similarly, drones can be deployed for engineering inspections. Flying a drone around a building removes the need for scaffolding and ladders, which improves safety and can also increase the scope of the inspection.

16.Artificial intelligence:

The volume of data available within the insurance sector makes it a prime candidate for artificial intelligence (AI). Already there are examples of insurers using more sophisticated machine learning analytics to support their staff in areas ranging from social media analysis to pricing and claims – and this trend is certain to continue.

Key Challenges in Insurance, Finance and Service Sector: -

As the digital revolution continues to dominate, it's clear that Intelligent Automation is transforming every industry. Banking, financial services and insurance (BFSI) is no exception. Using artificial intelligence and machine learning is said and, in some cases, proven to save companies time and money. But with all change comes challenges and fear.

1. Changing Customer Demands:

Companies are having to evolve to better meet the needs of their customers. Customers today are much more technology-empowered and as two new generations emerge, financial companies have to evolve to better suit the wants and needs of their customers. One of the major challenges, we will see is financial companies evolving their practices and attitudes to better meet the demands of these customers.

2. Evolving Workforce:

The workforce is evolving and financial companies have to adapt to this new way of work to stay successful. Customers today demand increased flexibility and a greater emphasis on work-life balance. More and more workers are becoming part of the gig economy and if financial companies want to stay successful, they should handle the workforce more efficiently.

3. More Responsibility:

The role of finance continues to evolve and take on new challenges and responsibilities. Technology is playing a huge role in the financial sector opening the door for finance teams to take on a greater role in IT and risk management. Technology is also helping the financial sector see revenue opportunities better, lower costs, and manage risk more effectively

4. Business challenges:

Lack of co-ordination between business units.

Lack of Identified process.

Lack of leadership commitment

5. Technology challenges:

Cyber security

Data Privacy

Data management

Balance between Data volume and Data quality

6. People challenges:

Hiring people who understands the latest innovations Real time applications Resistance from employees

7. The Rigidity of Hierarchical Organization:

Innovation unfortunately doesn't always survive in highly hierarchical organizations. Traditionally, rank or seniority determines whose ideas are listened to or considered. But if an organization solicits and filters ideas on the basis of expertise and ability instead, that may challenge the position or authority of some. Hierarchical structures also mean that any innovative ideas need to go through layers of approval.

8. An Increasingly Out-Of-Touch Culture:

In the current environment, understanding customer behaviour and attitudes is crucial, but most financial institutions are still offering a one-size-fits-all approach to cater to customers' needs. Today's customers are demanding more personalized self-service options anytime, anywhere. In addition, financial institutions should transform the

culture of the organization to ensure that it stays customer-centric. By being available 24/7 and providing personalized customer service, financial institutions stand a chance to bring an end to the common perception that they tend to put their own interests before those of their clients.

9. The Ever-Widening Technology Gap:

Last but definitely not least, banks and credit unions must be technology-driven. Financial institutions that have yet to re-engineer their legacy technology and processes to meet today's demands are being left behind.

CONCLUSION:

The final step in becoming an innovation leader is to take a detailed look at the opportunities of digital. This is not easy, given the challenges of the legacy IT systems, but many established banks and insurers have used digital to innovate and realized its potential to take out costs and respond more effectively to customer needs.

It is clear that there are real practical and cultural challenges to overcome in developing innovative approaches in the financial services sector. However, there are also some very significant opportunities for companies whose boards priorities innovation, bring in external perspectives, focus on the achievable and create a culture that values new ideas. The companies that truly embrace the innovation challenge will be the ones that create sustainable businesses that successfully meet the demands of a more competitive future.

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