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## THOUGHTPAPER | BFSI 2020

## EXECUTIVE BYTES

**MITHILESH SINGH**

Head Technology Audit,  
IDFC Bank

“Fintech companies are coming up with innovative solutions enabled by the India Stack. It’s a challenge for the banks but also an opportunity to solve a big pain point to add more customers in less time.”

**MAYANK SRIVASTAVA**

Country Head for IT,  
Schneider Electric India

“Most companies are now involved in data-intensive applications through advanced analytics, AI and ML to have customer loyalty and offer personalised services. This adds extra workload on their datacentres and hence it calls for modern power cooling solutions and datacentre solutions like DCIM.”

**NEERAJ GUPTA**

VP - Technology  
Application Management  
& Infrastructure at BA  
Continuum India

“Today, if you have to open a mutual fund account, the process is complicated even for an urban customer. It requires multiple documents and eKYCs - one after the other. Technology is surely the answer to increase market penetration, but it also needs to be simplified for the customer.”



BFSI CIOs and IT leaders evaluate how the intersection of artificial and human intelligence will shape the future of the industry.

## BFSI 2020: CASHLESS ECONOMY TO BE DRIVEN BY AI & HUMAN INTELLIGENCE

**BFSI sector in India has taken the plunge towards artificial intelligence (AI), chatbots, robotics and internet of things (IoT). But customer experience and data security will always have the final word, according to technology leaders.**

India will become the third largest domestic banking sector by 2050, after China and the US, according to a PwC report.

With India’s working age population set to increase over the next decade, it promises exponential growth.

According to IBEF data, India’s mobile wallet industry is estimated to grow at a CAGR of 150 percent to reach USD 4.4 billion by 2022.

Whereas mobile wallet transactions will touch Rs 32 trillion (USD 492.6 billion) by 2022.

## EXECUTIVE BYTES



**SEEMA GAUR**

Executive VP & Head - IT,  
IFFCO Tokio General  
Insurance Co Ltd.

“Chatbots should be multi-lingual. The portals and chatbots should be able to address the local customers of FSI sector in local Indian languages.”



**GURURAJ RAO**

CIO, Mahindra &  
Mahindra Financial  
Services

“Blockchain is a decentralized ledger system – it is optimal but it will always be less efficient than a well written centralized system. It will be difficult to replace a centralized system where it already exists and has been running for years.”



**MANISH KUMAR MIMANI**

Vice President & Head IT,  
Aviva Life Insurance  
Company India

“A combination of IoT, AI, CRM data and analytics can be used even in the case of general insurance to solve customer queries. Using smart and intuitive tech, the solution will be delivered before the customer generates a request.”



**SHANKAR GAWADE**

Vice President & Head IT,  
Axis Capital

“Physical banks will almost reduce to zero in the next five years as Indian customers get more internet savvy to carry out transactions on their mobile phones or end user devices.”

The overall insurance industry is expected to reach USD 280 billion by 2020.

To take advantage of this growth, the Indian Banking and FSI industry is placing its bets on disruptive technology such as RPA, blockchain, AR/VR and AI.

The efforts are still in pilot phase for banking players. But with the sector’s rising interests towards capturing customer share, tech is set to play a leading part in shaping the industry’s future.

### The urban-rural digital divide

The BFSI sector in India is changing due to the country’s big move in 2016 – demonetization. Digital technologies such as Unified Payment Interface (UPI), wallets, payments banks, artificial intelligence, analytics, robotics and cloud computing are driving customer solutions. But the concerns remain the same – how to increase market share and expand into new geographies.

Mithilesh Singh, Head Technology Audit at IDFC Bank, believes there is a divide between the rural and urban areas. Rural customers aren’t being fully tapped into.

“The traditional banks weren’t able to address these areas (rural) before. But Fintech companies are coming up with innovative solutions enabled

by the India Stack. It’s a challenge but also an opportunity to solve a big pain point – increasing customer share in less time,” he says.

BFSI institutions are also learning from the Fintech wave. Banks and financial services companies are aggressively leveraging tech like AI,

**Financial services organizations are addressing another key challenge – distribution with mobility, according to IT heads. Mobility is playing a major role to reach and service the rural customer.**

robotic process automation (RPA), machine learning and chatbots to stay ahead in the game.

Machine learning is extremely important as it can help organizations analyze and leverage customer spending and savings trends.

This is something that cannot be ignored, says Shankar Gawade, VP & Head IT, Axis Capital.

Today, if a customer uses services on one platform, he gets a message from another almost in real time – enabled by machine learning and analytics.

Technology is also expected to play a crucial part in further penetrating the urban market that is getting saturated as everybody is fighting for the same pie.

Simplicity is another big challenge, says Neeraj Gupta, VP - Technology Application Management & Infrastructure at BA Continuum India (Bank of America).

“If you want to open a mutual fund account, the process is complicated even for an urban customer. It requires multiple documents and eKYCs. Technology is surely the answer to increase market penetration, but it also needs to be simplified for the customer,” he adds.

For instance, almost every BFSI organization is implementing chatbots, but it needs to be hyper localized to be truly effective.

“It has to be multi-lingual,” says Seema Gaur, Executive VP & Head - IT, IFFCO Tokio General Insurance Co. The portals and chatbots should be able to address local customers of FSI sector in local Indian languages.

Connectivity remains a concern too. “All these digitally enabled offerings need to be connected to each other. You can ask a customer to electronically sign a document

(e-sign) but if connectivity is an issue, it's useless. But, as cost of data is decreasing this will also be addressed,” says Gururaj Rao, CIO, Mahindra & Mahindra Financial Services.

It is important for organizations to create strategies based on customer type and behavior, points out V Sendil Kumar, Vice President - IT, Sriram Value Services. “And for this, companies need to have proper data



in place. The data can be then analyzed to decide which segments need penetration and what type of customer base exists,” he says.

## Data decisions

BFSI industry in India and most of its IT leaders are actively weaving AI, ML, mobility and even cloud





into their tech infrastructure. But what about the big buzzword – Blockchain? Is it a threat or a boon to the traditional banking services?

There are players who are pretty dominant in areas such as cross border payments and transfers.

Blockchain has the power to disrupt the intermediary players as it is real time. That's one of the fears, says Mithilesh Singh.

The technology is going to change the traditional way of doing business. If you remove the middle layer involved in the settlement process, it is going to impact banking jobs across the globe, he points out.

Seema Gaur highlights that there is a consortium of over a dozen insurance companies involved with the blockchain process. “This helps streamline processes between different players and also helps

## Big tech trends for BFSI in 2020

- **AI & Big Data:** Analytics & AI leading to customer loyalty through personalised services.
- **Mobile Banking & Digital Payments:** Surge in digital payments might lead to a drop in physical branches.
- **Blockchain:** It can disrupt intermediary players involved in cross border payments.
- **Chatbots & Voice Assistants:** Need to be hyper localized to be truly effective.
- **IoT:** It will hugely impact insurance, especially claim settlements.

identify any fraudulent customer or illegal transactions. This will benefit the FSI industry at large. We are living in an era of co-opetition powered by technology,” she says.

But not every organization is looking at it with starry eyes.

“I have not found a single use case of blockchain which cannot be done using traditional techniques (through encryption and centralized databases). Blockchain as a decentralized ledger system is optimal, but it will always be less efficient than a well written centralized system. It will be difficult to replace a centralized system where it already exists and has been running for years,” says Gururaj Rao.

Another challenge is that every tech giant is coming up with its own blockchain segment, explains Singh. This creates silos. There is a fear among different organizations that once this technology becomes viable, the mid and smaller players could be left out.

The idea is – if something is not broken, why repair it?

The challenge also revolves around data. Mayank Srivastava, Country Head for IT, Schneider Electric India, points out that Indian BFSI segment is witnessing a huge surge in data (internal and external) as consumers access data through multiple devices.

“Most companies are now involved in data-intensive applications through advanced analytics, AI and ML to secure customer loyalty and offer personalised services. This adds extra workload on their datacentres and hence, it calls for modern power

cooling solutions and datacentre solutions like DCIM,” he says.

When it comes to storage, cloud is still a sore point for most BFSI players, especially for mission critical applications. Only some IT leaders are seriously considering putting all their data on cloud in the next couple of years.

**Not every organization is looking at blockchain with starry eyes. Certain banks have only recently started with a public cloud strategy, so widespread blockchain adoption by BFSI in India still has a long way to go.**

### Embracing the new

Manish Kumar Mimani, Vice President & Head IT, Aviva Life Insurance Company India, points out that the net savvy population does a lot of research before buying a solution, and generates lots of data. The urban segment needs a very different set of services and solutions – be it banking or financial services.

If the urban customer finds a better servicing partner, he may easily shift from one organization to another. As a result, customer loyalty is not that high in urban areas, he explains.

To address this, banks and FSIs are looking at reducing paperwork and multiple loops for customers. AI-driven models are being experimented with to create a future where organizations can reach out to the customer before he realizes he needs help.

Shankar Gawade says, “Physical banks will almost reduce to zero in the next five years as Indian customers get more internet savvy to carry out transactions on their mobile phones or end user devices.”

Gururaj Rao, however, feels that physical branches will still exist in India for a longer time especially with the urban-rural divide and demographics split.

“Technology undoubtedly will move the consumers towards online mode with more value added services and personalised data-centric reports. Will physical branches close down entirely? It’s tough to guess as of now.”

### BFSI 2020

What will a BFSI institution look like in the next decade? Time to market will be a crucial factor while implementing strategy for BFSI players, says Mithilesh Singh.

The insurance space too will witness huge disruption enabled by internet of things (IoT) and AI.

“In case of an accident, the IoT device inside the vehicle will be used to drive the settlement process. A drone could be sent to take pictures of the damaged vehicle, which will come back through the datacentre, and AI will further process the images.

“The damage will be assessed to alert the contact center accordingly. AI can continue the process by asking the customer if he wants the claim to be settled right away or point him towards the nearest hospital,” explains Seema Gaur.

As AI becomes smarter, organizations will become more open to adopting it for their customer facing solutions.

Manish Kumar Mimani highlights how a combination of IoT, AI, CRM data and analytics can be used even in the case of general insurance to solve customer queries. “Using intuitive tech, the solution will be delivered before the customer generates a request,” he adds.

Cloud, AI, blockchain, ML, robotics and mobility are here to stay for BFSI. But technology heads point out that India’s digital transformation story still needs some tweaks.

The Reserve Bank of India’s data localization mandate says all payment

data of Indians should be stored in local servers to provide unfettered access to the regulators. “This will have an impact on the meteoric growth of the digital payments industry. However, there is a need for a stringent laws when it comes to security of financial data,” says Mithilesh.

The sector is benefitting immensely due to colocation DCs and cloud, but at the same time has concerns about data security on all levels – physical as well as digital.

The BFSI industry will be driven by collaboration of man and machine, chatbots will be a norm and AI will become the backbone of analytics engine. Surge in digital payments and mobile banking might lead to a drop in the number physical banks for certain players. However, customer experience will be the competitive edge in digital India.

## Panelists

### 2018 CIO100- BFSI

**Mithilesh Singh**, Head Technology Audit, IDFC Bank

**Neeraj Gupta**, VP - Technology Application Management & Infrastructure at BA Continuum India (Bank of America)

**Seema Gaur**, Executive VP & Head - IT, IFFCO Tokio General Insurance Co Ltd.

**Manish Kumar Mimani**, Vice President & Head IT, Aviva Life Insurance Company India

**Gururaj Rao**, CIO, Mahindra & Mahindra Financial Services

**Shankar Gawade**, Vice President & Head IT, Axis Capital

**V Sendil Kumar**, Vice President - IT, Sriram Value Services

**Mayank Srivastava**, Country Head for IT, Schneider Electric

## Key Takeaways

### BFSI mantras for 2020

**Disruption is an opportunity:** BFSI players are learning from Fintech wave. They are leveraging AI, RPA, ML and chatbots to stay ahead in the game.

**Era of co-opetition:** Tech like blockchain can help streamline processes between different players and help identify fraudulent transactions.

**Intuitive tech:** AI-driven models are being experimented with to create a future where organizations can reach out to the customer before he realizes he needs help.

**Machine + human intelligence:** As AI becomes smarter, organizations will become more open to adopting it for their customer facing solutions.

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# REIMAGINING DATA CENTER DESIGN AND BUILD IN THE ERA OF EXTREME DIGITIZATION

Data centers are the premise where 0 and 1 reside, are processed and transmitted. While 0 and 1 has made the “IT world” more complex than ever, it has brought in technological advancements for the convenience and comfort of the human race. Criticality of data centers has never been as profound as today. The continued growth of IoT, the rising volume of digital traffic and the increasing adoption of cloud-based applications are the key trends that are changing the landscape of data centers.

Internet use is trending towards bandwidth-intensive content and an increasing number of attached “things”. At the same time, mobile telecom networks and data networks are converging into a cloud computing architecture. To support the needs of today and tomorrow, computing power and storage is being inserted out on the network edge to lower data transport time and increase availability. Edge computing brings bandwidth-intensive content and

latency-sensitive applications closer to the user or data source. Therefore, three types of data centers/servers rooms are coming up

- Large DC/Colo
- Regional DC
- Edge DC

As of now, companies are adopting combination i.e. Hybrid Model, which may evolve with fast-changing technology. With the



**Figure 1:** Future is digital and aligning with a company that has automation and energy management as the base mission, is an ideal step for any enterprise.

advent of such adoption, there is pressure build up on the companies during the phases of DC design and build (Assess, Plan, Design, Build and Operate).

Let's take an example of larger data centers - Due to their business models, the design and build time of DC's have reduced to few months rather than years. Speed of deployment is key along with availability, management, and security. For this, enterprise need following support:

- Reference designs to initiate design discussion
- Trade off tools to simulate various scenario and get budgetary cost for various architectural, technological combinations (e.g. – Tier-2 or Tier-3 /Use of Chilled water or Direct Expansion)
- Mobility solution to manage the infrastructure
- Benchmarking and comparing
- Adoption of High Efficient Products
- Management solution like DCIM along with Power and IBMS on single Platform.

This is where turnkey data center providers like Schneider Electric bring value by providing “Data Center as a Service model for

Physical Infrastructure”. Which mean companies can offload the ‘design & build’ to Schneider Electric with specified PUE. Schneider Electric will design/build and operate with the latest product and management tool and the enterprises need to just pay for the services. This reduces the security issue as their DC will be within their premise and enterprises get Colo type infrastructure support.

In case a Regional and Edge DC's prime requirement is to manage the multiple location physical infrastructure for efficiency, incidents and benchmarking, solutions like Schneider's EcoStruxure Platform can bring the connected products of multiple vendors, multiple locations on your palm, and bring about the analytics in perspective from preventive to predictive.

For all categories of data center, energy consumption of data center load like server/storage/networking should be co-related with the input power, and a converged monitoring/management of IT product, data center infrastructure management, power management & building management should be done, which is not the case at present. At present, all are being monitored independently. What is required is an integrated approach.

**EcoStruxure™** is Schneider Electric's name for our IoT-enabled, open, and interoperable system architecture. A system architecture is a conceptual model that defines the structure and behaviour of a system. In the case of EcoStruxure, the system is comprised of 3 levels: connected products, edge control, and apps/analytics/services (see Figure 1). The layers connect to each other through the flow of data over IT networks. Cybersecurity technologies and practices are used at each level to ensure protection. The EcoStruxure architecture maximizes the value of data to deliver improved safety, reliability, efficiency, and sustainability for our customers and their data centers.

**To Know more about EcoStruxure™ for data centers, please visit**

<https://www.schneider-electric.co.in/en/work/solutions/for-business/data-centers-and-networks/>

Or call us at  
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