

Investing in Telecom

BFSI players deploy latest technologies to improve services

The reach and scope of banking and allied services in India have increased manyfold over the last few years. As per industry estimates, the country's banking sector is valued at Rs 81 trillion with the potential to become the fifth largest in the world by 2020 and the third largest by 2025. According to the India Brand Equity Foundation, the total asset size of Indian banks is expected to grow from \$1.5 trillion in 2012 to \$28.5 trillion by 2025. Further, the increase in the country's working population and disposable income will be the key growth drivers for banking and insurance services. Housing and personal finance will be the other two big contributors to growth in the banking sector.

As an industry that aims to provide customer service and reach out to the maximum number of people, it is important for banks and financial institutions to remain ahead of the curve in technology implementation. Therefore, companies in the banking, financial services and insurance (BFSI) industry have been adopting telecommunication and IT tools to reach out to the masses. The majority of Indian banks have been investing in setting up a secure telecom network that supports a large number of mobile applications to expand their business. To meet their connectivity requirements, a large number of banks have set up wide area networks (WANs) using leased lines, internet protocol and virtual private networks (VPNs) to support huge volumes of transactions. They are also using various software and mobility solutions to comply with regulatory and security requirements, provide superior customer experience and reduce turnaround time for transactions. Both large and small banks deploy IT solutions for running critical functions such as core banking system integration, banking regulatory compliance, government and corporate transactions, business intelligence, surveillance, data warehousing and management information system.

One of the most widely deployed enterprise solutions in the BFSI space is data warehousing, which is used primarily for campaign management and reporting. The data warehousing solution is used to provide data feeds to different departments like credit cards and customer profiling for identifying the right customers to be pursued for up-selling and cross-selling various banking and insurance products. One of the country's largest banks, ICICI Bank uses a data warehousing solution for business intelligence and data analytics. Besides data warehousing solutions, players in the BFSI sector also deploy solutions for fixed asset management and project management. They are able to manage and monitor their physical assets throughout their lifespan with the help of the fixed asset management solution. Similarly, by using project management applications financial institutions are better positioned to allocate budgets for multiple years and monitor payouts on the achievement of goals. Apart from fixed asset and project management, regulatory compliance is another focus area for BFSI players. All local and foreign banks are required to submit regular reports on compliance with statutory obligations to the Reserve Bank of India. BFSI players rely on end-to-end regulatory reporting software which allows them to create a central depository of data, integrate data from multiple sources into a comprehensive and logical data model, ensure consistency while preparing operational and business reports, and track and audit doubtful transactions.

Further, with growing mobile phone penetration, the BFSI sector is using mobile devices to speed up customer acquisition and customer servicing life cycles. A large number of vendors provide banks with secure mobile-based platforms for facilitating mobile banking which allows customers to access banking services on a 24x7 basis. They can receive alerts regarding transactions and new products, and access banking services any time, anywhere. In order to extend and maximize their reach, BFSI players deploy a pull-based SMS strategy to market their products and services to potential customers.

As technology solutions for the BFSI sector continue to grow, some of the emerging trends are mobile, big data and social media. Many websites have added a live chat feature which helps resolve various issues, and the agents who handle these customer queries are trained specifically for this job. Big data can help contact centre systems recognise their customers' patterns based on past history and provide them with the information they need without being prompted to do so.

A report by Gartner on IT spending by Indian banks and security companies reveals that these players are expected to spend Rs 477 billion on IT products and services (including telecom) in 2014. According to the research firm, vertical-specific software will emerge as the fastest subsegment due to core banking system replacements and other back-office consolidation, which will see banks moving away from internally developed software to external packages. Further, Gartner states that in 2014, banks will continue to focus on expanding their branch network. By the end of 2014, there will be about 2,000 new branches in India. The modernisation of the back office as well as the need to be compliant with international regulations will drive the sector to make significant investments in the IT and telecom sector.

tele.net conducted a survey among various companies in the BFSI sector to assess their telecom requirements, the challenges faced by them and the solutions deployed to address the same.

The following questions were asked as part of the survey:

- What are the key technology requirements of the company?
- What mix of service providers and vendors is used?
- What are the major concerns with respect to telecom infrastructure?
- What are some of the mobility and enterprise applications adopted by the company?
- Which network security and redundancy tools are used?
- Which new product or service is of most interest and holds relevance for the company?

Key technology requirements

For banks and financial institutions, ensuring customer satisfaction and driving business optimisation are the two major focus areas. Given the large volume of data and sensitive information managed by companies in the BFSI sector, it is imperative that these firms invest in scalable and secure telecom networks.

According to the survey, BFSI companies are using telecom and IT as strategic tools to process large volumes of data, integrate data and applications, achieve shorter time-to-market and lower network maintenance costs. The majority of BFSI

players have established a WAN-based system, comprising multiprotocol label switching (MPLS), leased lines and VPNs to support the day-to-day connectivity requirements. MPLS helps the companies extend connectivity to remote users and a VPN offers enhanced network security, remote network control, easy sharing of data and reports, and improved network performance at lower costs. For example, the IFFCO-Tokio General Insurance Company uses a combination of an MPLS and a VPN network and broadband links to connect its offices. The majority of the company's offices are connected through an MPLS-VPN network while a few are connected with alternative leased lines sourced from various service providers.

Besides putting in place a robust telecom network to support their critical operations, many companies are also expanding their reach and increasing transactional capacities by adopting a host of telecom and IT applications. Currently, IT is being used for financial inclusion, and to facilitate mobile banking and electronic payments, optimise customer management and business intelligence, and achieve business optimisation. To augment business services and control functions, both large and small banks have undertaken upgradation of their core banking systems, as well as virtualisation of their servers and data centres. Moreover, to counter the increasing competition, retain existing customers and acquire new ones, BFSI companies have also been focusing on operational performance improvement including workforce training, workflow automation, and business process re-engineering. For instance, with its expanding footprint, PNB MetLife undertook significant changes in its telecom



infrastructure. The insurance company replaced its legacy banking system, which was in line with the Portuguese banking standards, with CSC's technology platform, LIFE/Asia. According to Gaurav Sharma, chief operating officer, PNB MetLife, "With the company's growing business, the old administrative platform was proving to be inadequate in handling huge volumes of data. There were also issues regarding scalability and integration of new applications with the company's core banking system. Therefore, it was imperative for the company to move to a new banking system."

Service providers and vendors

Based on their requirements, the BFSI companies source IT and telecom services from multiple operators. These include Bharat Sanchar Nigam Limited (BSNL), Tata Communications, Bharti Airtel, Tata Teleservices Limited, Mahanagar Telephone Nigam Limited, Reliance Communications, Vodafone India, Aircel and Tulip Telecom. They also deploy various IT and enterprise-led solutions offered by companies like Oracle, RSA, Microsoft, IBM, Wipro, HP, Dell, McAfee, Avaya, Juniper Networks and Tata Consultancy Services.

Key issues and concerns

Selection of appropriate service providers and vendors, integration of multiple technologies, timely technology upgradation, time-to-market, increasing cost of technology, and network downtime are some of the major issues faced by the BFSI sector. Educating and training employees to leverage new software and technology tools is another key challenge.

For example, one of the major concerns before IndiaFirst Life Insurance Company while introducing new solutions and applications was the integration of new services with the existing infrastructure and ensuring quick time-to-market. The company addressed these two challenges by carrying out network upgradation in phases. To ensure seamless integration of new applications, the company first implemented critical functions related to core insurance, and followed it by introducing ancillary applications.

Further, BFSI players have to consider the life cycle of various IT products in terms of the investments made in hardware and software vis-a-vis their expected benefits. Moreover, the technological upgradation necessitated by obsolescence over time requires banks and financial institutions to have a roadmap for migrating to the new system in order to ensure complete data integrity. Considering the need to maintain 24x7 real-time capabilities, these players need to ensure that the switchover to the new system causes minimal disruption to customers. Further, this process of re-engineering requires intensive staff training and acquisition of new skills.

Popular applications

The adoption of mobility and enterprise solutions helps banks evaluate customer behaviour, facilitate business process re-engineering and manage multiple distribution branches. The adoption of mobility solutions by BFSI players is increasing since these help organise, automate and synchronise sales, marketing, customer service and technical support for effective customer relationship management. At present, companies like ICICI Bank, PNB MetLife, Bank of Baroda, IDFC and IDBI are using mobile devices for on-boarding of customers. Mobile devices are capable of reading data, scanning documents and processing images, and have made banking possible from the comfort of one's home. Customers are no longer required to personally visit a bank branch to avail of financial services.

Some of the common services offered through mobile phones are SMS alerts (on ATM withdrawals, credit card purchases, etc.), cheque book requests, payments of utility bills, debit and credit statements, fund transfers, opening of fixed deposits and cash management.

Network redundancy

The leading banks have established data centres that host the company's website and use advanced data replication tools for ensuring data backup and recovery. In addition, these companies use services from multiple operators and deploy primary and secondary leased lines to ensure uninterrupted connectivity. In case of a failure in the primary network, companies fall back on the secondary network to support critical functions. For example, Federal Bank Limited has connected its branch offices with its data centre and data recovery centre. The bank utilises the services of BSNL and Tata Communications for establishing connectivity between its branch offices and the data centre. In case of a network failure, it uses an ISDN link as a backup.

Network security

The adoption of new technologies and the growing popularity of various payment gateways and mobile banking have significantly increased the risks associated with data and transaction security. In line with the RBI's guidelines, the BFSI companies have made significant investments in setting up secure networks.

The banks secure their network through a three-layered security structure. At the network level, they use firewalls and filters; at the core banking/application level, the vendors are responsible for security; and at the third-party application level, the banks safeguard middleware, databases, web servers, etc. with security solutions that are provided by their vendors.

PNB MetLife ensures network and data security through tools such as firewalls, antivirus packages, content filtering and intrusion detection systems. Similarly, Dena Bank uses intrusion prevention tools and content filtering to secure its data.

The way forward

At present, banks have a large volume of customer data pertaining to demographics, transactions and behavioural patterns. Going forward, one of the key focus areas for BFSI players will be to derive information using this data to deliver optimised services. Banks will be required to integrate data warehouses and analytical capabilities, both in terms of workforce and analytical tools. In addition, they will require a robust customer life cycle management programme to utilise the information effectively.