7: FINANCIAL SERVICES AND INFORMATION

7.1 FS-ISAC

FS-ISAC stands for Financial Services Information Sharing and Analysis Center.

The ISACs were created as a result of Presidential Decision Directive 63 (PDD-63) in 1998. The directive requested the public and private sector create a partnership to share information about physical and cyber threats, vulnerabilities, and events to help protect the critical infrastructure of the United States. PDD-63 was updated in 2003 with Homeland Security Presidential Directive/HSPD-7 to reaffirm the partnership mission. Today there are ISACs for fourteen critical infrastructures, such as Financial Services, Electric, Energy and Surface Transportation

The FS-ISAC gathers threat, vulnerability, and risk information about cyber and physical security risks faced by the financial services sector. Sources of information include commercial companies who gather this type of information, government agencies, CERTs, academic sources, and other trusted sources. After analysis by industry experts, alerts are delivered to participants based on their level of service.

Members may create a profile on the FS-ISAC website to identify specific areas of interest or receive all alerts. For both physical and cyber events, alerts contain a description of the threat or vulnerability, its severity, and recommendations for solution.

The FS-ISAC is rapidly expanding its membership by using multiple tiers of membership and working closely with industry associations. Eligible firms are in the banking and finance sector. Through the membership and license agreements with trade associations, the FS-ISAC is delivering urgent and crisis alerts to eligible firms that make up the majority of banking assets
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and securities transactions in the United States. The Board of Directors’ names and companies they represent along with Platinum and Gold member institutions may be found on the FS-ISAC website. Member firm names are not released without member permission and no data is ever attributed to an individual member without that member’s permission.

The FS-ISAC was launched in 1999 to help members prepare for Y2K and establish an anonymous information sharing capability within the financial services industry.

Yes, the U.S. Department of Treasury is the official government sponsor and has provided substantial project funding to meet the requirements of the FS-ISAC. FS-ISAC membership is also recommended by:

- The United States Treasury
- The Office of the Controller of Currency
- The United States Secret Service
- The Department of Homeland Security

The Financial Services Sector Coordinating Council, which represents 26 Financial Services Associations and Utilities representing over 25,000 eligible firms. Additionally, the FS-ISAC has the endorsement of its members.

Since 9/11, protecting the critical infrastructure of the United States has become a priority for our country. Each firm in our sector has the responsibility for doing its part in protecting the financial services sector critical infrastructure. Being a member of the FS-ISAC is one way your firm can help protect your clients from loss or inconvenience and support Homeland Security initiatives. Most importantly, the U.S. Treasury and the Department of Homeland Security use the FS-ISAC to disseminate critical information to the financial services sector in times of crisis.
FS-ISAC membership and participants include eligible firms in the financial services sector:

- Banking Firms & Credit Unions
- Securities Firms
- Insurance Companies
- Credit Card Companies
- Mortgage Banking Companies
- Financial Services Sector Utilities
- Financial Services Service Bureaus
- Appropriate Industry Associations
- Hedge Fund IT
- Security Service Providers

The FS-ISAC Board of Directors manages the FS-ISAC. Each Board member serves a three-year term and is elected by the Premier and above Members. The board elects board officers for two year terms.

Only members with the appropriate credentials have access to the database. Critical Notification Only Participants (CNOP) has no access to the database, Basic and Core Members have limited access to the database, and Standard Members and higher have access to all features and benefits of the database.

The FS-ISAC receives alerts and information from many sources, including government agencies and law enforcement. However, it is a one way flow of information: NO government agency of any type or law enforcement agency has any access to member-submitted events without prior approval of the submitting financial institution. The FS-ISAC has and will provide the appropriate government departments with summary sanitized data based on a need to know basis.
The current FS-ISAC database has thousands of threats, vulnerabilities, and events dating back to 1999. Premier and above members may use this database to do research and investigations. The FS-ISAC analysts use the database to establish trends, do research, and investigations. Over time the FS-ISAC is expecting to offer advanced analytics to Premier and above members to study multiple firm IDS data and other sophisticated programs to predict the likelihood of events.

Certain firms who provide products and services designed to make the financial services sector stronger and safer, are an essential part of the FS-ISAC's ability to achieve its goals. Participation in the Affiliate Member Program is designed to enhance the understanding of sector progress in information sharing and the tools used to enhance security. The FS-ISAC Board of Directors must approve each Affiliate Member application.

7.2 2012 Business Banking Trust Study

Guardian Analytics Releases “2012 Business Banking Trust Study”, Highlighting Key Fraud Findings and Providing Conclusions and Opportunities for Financial Institutions and Businesses Guardian Analytics, in conjunction with the Ponemon Institute, completed its third annual business banking trust study. The study reports fraud continues to hit a majority of businesses, which continue to look to their financial institution (FI) as primarily responsible for securing the online channel. Businesses still are not improving their defenses, and a majority continues to lose money due to fraudulent transactions. Finally, businesses hit by fraud continue to take their business elsewhere, showing very little patience for an FI that can’t protect their accounts.

• 74% of businesses surveyed have experienced online fraud; 52% in the past 12 months;
• The percent of businesses that conduct all of their business banking online has more than doubled in the last 2 years;

• 72% of SMBs indicate that they believe their FI is ultimately most responsible for ensuring that their online accounts are secure;

• Following a fraud incident, 70% of SMBs have diminished confidence in their FI or take all or some of their banking businesses elsewhere.

New to this year’s study is a section specifically about the incidence of fraud for businesses using ACH payments, mobile banking, and wire transfers, and the impact of fraudulent transfers in each of these channels on their relationship with their financial institution.

7.3 The State of Phone Fraud

Pindrop Security has released its “The State of Phone Fraud, 1H 2012” report, providing a comprehensive view of phone fraud targeting consumers and organizations, and providing an analysis of this data including where attacks are occurring and how often.

According to the report from Pindrop Security:

• There were nearly 1.3 million instances of phone fraud, in the U.S from January – June 2012. This is a 29% increase over the prior period, July –December 2011.

• 9 out of the Top 10 Banks and 34 of the Top 50 Banks either had their name spoofed in Caller ID data or were impersonated by fraud callers.

• Fraud targeting consumers is rampant. Estimated losses for identity theft over the phone are more than $10 billion annually, based on data from the Federal Trade Commission and Javelin Strategy and Research

• Top cities ranked lowest to highest in incidents: Phoenix, Dallas, Chicago, New York, Los Angeles

• Top states, ranked lowest to highest: Pennsylvania, Texas, Florida, New York, California
• Top states, per capita, ranked lowest to highest: Indiana, Idaho, Nevada, Wyoming, and Delaware

7.4 Trusted Email Registry (Product)

For banks the greatest asset is their name. A bank spends years in cultivating their identity, millions of dollars growing reputation and endless hours building strong customer relationships.

But a single phishing activity could destroy banks name in minutes. Just one click to break customer’s trust in bank. Then what should be done to protect Bank from malicious attack. One solution is email governance. It constitutes
1. Real time analytics, notifications and reports about bank’s entire email channel
2. Real time alerting when critical email authentication incidents occur
3. Proactive tool for discovering and cataloging 3rd party email senders
4. Real time controls for stopping phishing attacks

Email governance is necessary because we can’t distinguish between good and bad email. Without controls criminals do not ever need to steal bank’s identity, it is freely given to them. The product by FS-ISAC Trusted Email Registry, Powered by Agari is designed to identify bad emails in our mailbox. It collects “Big Data” feedback from 1 billion mailboxes that gives us the information needed to take back control of our email channels.

By working in real – time with the world’s largest email networks for end- to end tracking, the Trusted Email Registry provides a holistic view of our email landscape from the cloud down. If an email impersonating our domain is sent, the Trusted Registry lets us know. All mail activities received by Mail Providers are presented back to you for monitoring and analysis.
Trusted Registry allows us to quickly publish authorized policies to Mail Providers in the cloud for protection and enforcement. It helps to reduce reputational risk and avoid potentially damaging media coverage that negatively impacts us bottom line.

7.5 Technological Developments in selected Public Sector Banks

7.5.1 Punjab National Bank

- **Origin**: 1895
- **Branches**: 5937
- **Business**: Rs.6,79,823 crore
- **ATM**: >6050

Technological Development

Core Banking Solution (CBS) is offered at all the branches of the Bank providing flexibility and convenience to all customers. Core Banking Solution is built on robust and scalable platform through state-of-art Network Operating Centre (NOC), dual network connection at all branches and automated Business Continuity Plan (BCP). It is integrated with NEFT, RTGS and SWIFT payment networks.

The CBS setup handles approximately 4 million transactions per day. High availability of services (99.9%) is ensured with adequate redundancy at every layer of the setup.

With 100% CBS at PNB, Bank rolled out CBS at all its six sponsored Regional Rural Banks (RRBs) thereby extending the coverage of benefits of technology to the rural population. 100% implementation of CBS in all branches/offices of six RRBs was completed much ahead of the deadline. The branch is effectively integrated with alternative channels of service delivery viz., ATMs, Internet Banking Services, mobile banking, etc.
Transactions through Alternative Delivery Channels (ADC) have registered considerable growth during the past year. Currently, more than 28% of the total transactions in the Bank are undertaken through ADC which includes ATM / Debit Card / RTGS / NEFT etc.

**Internet Banking Services**

Bank’s internet banking services offer a complete e-bouquet of banking and financial services. With over 11 lac retail and around 2 lacs corporate Internet Banking users, PNB’s Internet Banking is witnessing a steady shift of customers for transfer of funds, inter-bank remittances and payments towards various services. The channel was extended for collection of VAT/ State Taxes for the states of U.P, Bihar, Maharashtra, HP, Delhi, Orissa and Chhattisgarh during the year. By collaborating very actively in all thee-initiatives of Govt. of India as well as several state Governments, Bank has positioned itself as a leading e-service provider. The effectiveness of the channel is enhanced with the utility payment facility for all the popular service providers.

**SMS Alert Services and Mobile Banking Services**

SMS Alert facility is being availed by over 21 lac customers through generation of SMS Alerts on identified financial transactions undertaken through branches and delivery channels (POS, ATM, Internet Banking & Mobile Banking). The SMS Alerts are being sent for certain non-financial activities as well. The channel was leveraged for providing information on Bank’s products and services over SMS under the SMS Pull Mechanism.

The Bank launched its Mobile Banking services in February 2010. Utilizing this platform, a customer can undertake banking transactions through their Mobile handsets. The extension of mobile payments has added value to the channel as the users can also make payments of utility bills/services using their mobile phones, besides effecting transfer of funds to third party accounts.
ATM Services

In order to provide greater convenience to public, more than 6050 ATMs have been installed. Apart from the facility of cash withdrawals, balance enquiry, mini statement and PIN change, Bank’s ATMs offer other value added services to the cardholders like Transfer, Bill Payments, mobile registration for generation of SMS alerts etc. Some additional features like payment of Income Tax through PNB ATMs are also extended to our customers. Transactions through ATMs showed a growth of 36% during the year 2010-11.

ATM/Debit Cards

In order to provide greater flexibility and convenience to customers, the Bank has issued more than 13 million ATM/Debit Cards till date. Bank has introduced new free benefits for PNB Debit Cards holders in the form of free accidental death insurance up to Rs. 2 lacs, and redeemable Reward Points on usage of Debit Cards at POS outlets or fore-commerce transactions.

Fund Transfer (NEFT)

The facility of RTGS and NEFT is being provided in all branches of the Bank and also facilitated through Internet Banking channel. Internet banking customers can remit funds just by click of a button without any bank/branch intervention to any RTGS/NEFT enabled branch of other banks in India.

Enterprise wide Data Warehouse

PNB is the first nationalized Bank to implement an Enterprise-wide Data Warehouse to integrate data from multiple source systems and provide Business Intelligence and decision support system. It also serves as a source of data feed for Anti-Money Laundering, risk management and Customer Relationship Management system.
Recognition

In recognition of technology initiatives, the Bank won various awards during the year. These include PC Quest Best IT Implementation Award 2010 for CBS, SKOCH Award 2010 for "Computerization of RRBs", SKOCH Financial Inclusion Award 2010, National Awards on e-Governance 2010-11, best IT initiative Gold award under the category ‘Innovative use of ICT by PSUs for Customer’s Benefit’ and ‘Best Technology Bank of the year’ Award by Indian Bank’s Association.

The Punjab National Bank Institute of Information Technology (PNBIIT) has been set up by Punjab National Bank, a leading nationalized bank in the country, to serve as an infrastructure model with high-tech environment and state-of-the-art systems, demonstrating use of IT in the management of administrative and training activities.

7.5.2 UCO Bank

- **Origin**: 1943
- **Branches**: 2500
- **Business**: Rs. 3.05 lac Crore
- **ATM**: 1369

UCO Bank is a Nationalized Bank. Headquartered in Kolkata, UCO Bank has an extensive network of over 2,000 service outlets and 35 regional offices across India. With additional offices in Hong Kong, Singapore, Malaysia and China UCO Bank conducts extensive foreign exchange business in more than 60 centers across India.

Information Technology

In the field of information technology the Bank crossed an important milestone by bringing all its 2148 domestic branches and 7 extension counters under the hold of CBS. Customers can now avail "Anywhere-Anytime Banking" through any of the Bank's branches.
Through its Alternate Delivery Channels - viz. ATM facility which allows cash withdrawal, viewing position of accounts, transfer of funds from one account to his other account or third party account and UCO e-banking facility which allows viewing transactions, generating statements of accounts, transfer of funds from one account to his other account or third party account, Utility Bill Payment - banking services are available to the customers 24x7 and 365 days of the year.

The Bank has expanded its ATM network by 64 during the year, and presently it has installed 478 ATMs across the country and it has planned to expand it further. The Bank is a member of National Financial Switch (NFS] as a result of which the Bank's ATM card can now be used at more than 49880 ATMs of other member banks under the said arrangement.

UCO SMS banking now offers the customer’s facilities like balance inquiry, viewing last three transactions, cheque status Inquiry, getting reminders for Bill Payment/term deposit maturity. The Bank is in the process of implementing Mobile phone banking for financial transactions also.

National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) facilities are available in all 2148 CBS branches. The Bank is in the process of introducing RTGS and NEFT through Internet Banking very soon.

A branch on wheel (van) equipped with cutting edge technologies and having CBS-facility has been rolled out by the Bank for reaching out to the unbanked.

In addition to the already existing City Back Offices (CBO) at Chennai, Bangalore and Hyderabad, CBO-Kolkata has commenced operation in March' 2010 on a limited scale.
UCO Online intranet has been put in place to keep employees regularly updated with instructions/circulars/manuals. A Virtual Classroom and discussion forum have been developed and hosted on UCO Online for interaction between Faculty of Staff Colleges and staff members.

The Bank achieved a technological breakthrough within the banking sphere by conceptualizing and introducing CBS-enabled "UCO Mobile Bank" in West Bengal. This branch-on-wheel having facilities like Biometric ATM and Braille for visually challenged customers, was launched by Sri Pranab Mukherjee, Hon'ble Union Finance Minister at Devli village, Murshidabad Dist., West Bengal on 17.4.2010

The bank is also taking steps to put in place a robust technology platform to provide best service and value to the customers. The major initiatives proposed include introduction of GPRS based Mobile banking with financial transaction facility, deployment of Biometric ATM, On-Line Share Trading, Off site Railway E-ticketing Kiosk, Customer Self Service devices like Pass Book Printing Kiosks, Cheque Deposit machines, Intelligent Cash Deposit Machine at heavy footfall branches and setting up of Information Kiosks.

**Outsourcing**

UCO bank has outsourced its various IT related work to M/S Xchanging. Xchanging designs, builds and runs a range of technology solutions for business processing. The company embeds its Intellectual Property (IP) to create a solution faster and more cost effectively than customers can themselves. These technology services are aimed at organisations that wish to use IT services to improve organisational effectiveness and profitability. UCO bank is getting support from Xchanging EastNets’ for implementation compliance and payment solution conforms to international banking benchmarks. The solution will provide a secure
environment for efficient duplication detection, and recoverability of high volume messaging traffic. The scope of the implementation also includes back-up of foreign exchange payments and telecommunications platform.

7.5.3 **Bank of Baroda**

- **Origin**: 1908
- **Branches**: 4381
- **Business**: Rs. 6.72 lac crore
- **ATM**: 2859

**Information Technology**

In order to provide superior internet banking experience to its customers, Bank migrated the Core Banking System (CBS) to higher version with enhanced features. Additionally, various new modules like Fixed Assets Maintenance, Sales Tracker Module, Centralized Service Tax, Bank Realization Certificate (EBRC) Module, Account Number Portability and Workflow Automation for New Pension Scheme, Swavalamban, were implemented.

All CBS branches of Bank are enabled for interbank remittances through RTGS and NEFT which have also been interfaced with Bank"s internet banking portal.

Bank continued to add more facilities under its Internet Banking channels. The Internet Banking -- Baroda Connect -- now provides speedy and secured facility to transfer funds to self, third party (within the Bank) and inter-bank. The SMS Alerts, RTGS/NEFT transactions are also provided in your Bank’s internet portal. The ASBA (Application Supported by Blocked Amount) functionality has been introduced in Baroda Connect for online subscription to Initial Public Offers (IPOs) and Follow-on Public Offers (FPOs) to facilitate application for equity shares.
Bank added more facilities to the Mobile Banking channel through Baroda M-Connect viz. Balance Enquiry, Mini Statement, Linking of Multiple Accounts, Fund Transfer, Bill Payments, Ticket Booking, Shopping, Feedback/ Complaints etc.

The ATM switch is now integrated with seven interchanges viz. National Switch NFS (NPCI), Visa, MasterCard, CBUAES (UAE), CBOMAN (Oman), Link (T&T), Paymark (New Zealand) to provide convenience to customers by increasing delivery points through ATMs. With a centralized depository application. Bank’s branches are now equipped to provide depository services for both NSDL as well as CDSL. With Online Trading System. Bank will be able to provide a complete suite of online services to customers for trading in instruments like equities, mutual funds, bonds and initial public offering (IPOs).

Additionally, Bank took several other IT related initiatives such as Internet Payment Gateway services for debit cards/credit cards, Cash Management System covering services like Receipt Management (Collections), Payment Management and Invoice Management (Receivable and Payable Management), Payment Messaging Solution (PMS) {that was implemented in 20 overseas territories and all authorized branches in India}, a grid based Cheque Truncation System (CTS) {implemented in NCR-New Delhi, Chennai, Coimbatore and Bangalore}, and initiation of an Automated Cheque Processing Centre (Inward & Outward) in Mumbai.

Moreover, Bank undertook measures to create Data Warehouse for providing flexible and interactive source of strategic information, Customer Relationship Management for better customer insight and uniform customer view across channels.
Amongst several awards, in particular, Bank has received the awards like Best Public Sector Bank (PSB) by CNBC-TV18 & MCX; the Golden Peacock Award for Excellence in Corporate Governance by the Institute of Directors & World Forum for Corporate Governance in London; the Dainik Bhaskar India Pride Award for 2011; the Most Efficient Bank in Kenya; the Best Initiatives in Inclusive Banking - FIBC Banking Award; the Dun & Bradstreet's Leading PSB in "Global Business Development Category", the National Award for Performance under the SME Business; the Award for Best Utilisation of Intellectual Resources; the Best Growing Large Bank by the Business World-PWC; the Business Leadership Award by NDTV- Best PSB in 2011; the Award for Excellence in Financial Reporting by the ICAI in PSB category; the Fastest Growing Large Bank by Business World-PWC; the UTV-Bloomberg Financial Leadership Award and the FM Stars Industry Brand Leadership Award.

Furthermore, Bank’s Brand Ranking increased by 47 notches in just a year's time in the Top 500 Banking Brands by The Banker, London during FY12.

**Bank’s IT-enabled Business Transformation Programme:**

- The Bank’s Technology initiatives are clearly focused on the customer. The Business Transformation Programme encompassing technology is being implemented by the Bank with a view to provide its customer, convenience banking on 24 X 7 basis in India and abroad through deployment of a single Core Banking Solution platform across globe with integrated delivery channels like ATM, Internet, Phone, Mobile, Kiosk, Call Centre etc.

- As compared to other banks our technology deployment is not restricted to only core banking solution. It also covers other applications like Enterprise wide General Ledger, Risk Management,
Anti-Money Laundering, Cheque Truncation, Credit Cards, Mutual Funds, On-line Trading, Data Warehousing, Customer Relationship Management, SWIFT, RTGS, NEFT, Internet Payment gateway, Global Treasury, Human Resources Management System, Employee Pay Roll, Cash Management, Mobile Banking, SMS delivery, Retail Depository, Phone Banking, Risk Management, Knowledge Management etc. which are well integrated and provide a seamless experience to customers of all segments and lines of business.

- These applications also provide critical MIS through Data warehouse for timely business decision.
- We are one of the few Public Sector Banks having our Internet Payment gateway offering E-commerce services.
- With 100% CBS and various initiatives, Bank has enabled its customer with the state of the art technology; duly complemented with the human interface.
- The Bank has large network of ATMs in India.
- The Bank’s plans are to extend this network in stages in future. The Bank also plans to deploy low cost ATMs at Rural centers.
- Bank has launched School fees collection module which enables payment of School fees through Bank’s ATM.
- Bank’s Debit Card holders can use their card at all VISA ATMs in India and around the world. Bank’s Debit Cards are also accepted at Points of Sale (POS) across the country and on terminals worldwide.
- Master Card holders and holders of VISA cards issued by other banks can also access their accounts through our Bank’s ATM network.
- Bank’s Debit card supports multiple accounts of card holders whereby multiple accounts can be linked to a single Debit card.
- CVV2 implemented for domestic VISA Debit cards.
The Bank is a member of National Financial Switch (NFS). This enables our customers to use ATMs of other banks who are members of NFS, at a significantly low or no cost.

The Bank has launched full-fledged transaction-enabled Internet Banking in India. Through this platform, customers have the facility to pay both Direct and Indirect Taxes online, make payment of utility bills, Insurance premiums and also book railway tickets. Corporate have the facility of direct salary uploads. Internet Banking has also been launched in most overseas territories. SMS Alert facility is provided to eBanking customers.

Under Baroda Connect, Customers have interfaces for online donation to Guruvayoor temple, Shirdi Temple & Nathdwara Temple, Techprocess Online Bill Payment and Shopping, Online CC Avenues - an online shopping portal, Online Gujarat CST payment, online payment of Rajasthan VAT and CST and Online Payment of UP VAT.

To protect our customers from phishing attempts Bank has implemented beneficiary registration for third party fund transfer activities.

NRI’s can avail this service from our Overseas branches in UAE, Oman, UK, Mauritius, Seychelles, Botswana, Hongkong, Fiji, Ghana, Kenia, Guyana, S. Africa, Tanzania, Uganda, Trinidad & Tobago, US and Zambia which facilitates almost instant credit to their accounts with us in India. Where they maintain accounts with other Banks, same day or next day credit is facilitated through RTGS/ NEFT.

3D secure implementation has been completed under Internet Payment Gateway. IPG facilitates direct customer merchant transactions and settlement through the Bank’s Central ATM Switch.
- All branches are RTGS and NEFT enabled. RTGS and NEFT have been interfaced with our Internet banking portal. This provides customers the facility of making interbank money transfers online using Internet banking.
- SWIFT facility for worldwide inter-bank financial communication is provided at Foreign Exchange Authorised Branches in India as also in overseas territories.
- Bank of Baroda is the first Public Sector Bank in India to implement a Web-Based Lending Automation System and its in use in all its branches for its Retail Lending Operations.
- Bank has implemented Online Tax Accounting System (OLTAS) for collection of taxes on behalf of Central Board of Direct Taxes, Govt. of India at 551 branches.
- This is operational between Bank’s Kaligram branch, Ahmedabad, and ICD, Sabarmati (Centre for payment of customs duty and duty drawback), Ahmedabad.
- The system is also operational between Bank’s Navrangpura Branch, Ahmedabad and Customs & Central Excise Department, Air Cargo Complex, Ahmedabad.
- Bank of Baroda runs 5 MICR centers - at Ahmedabad, Rajkot, Coimbatore, Jamnagar and Bhavnagar.
- Operations at all Banks’ overseas branches, Offshore Business Units, Joint Ventures & Subsidiaries are 100% computerized.
- Core banking at territory level is implemented in 19 overseas territories and remaining two will be migrated to Finacle CBS shortly.
- Bank of Baroda is the first Public Sector Bank in India to implement Integrated Treasury and Risk Management solution at its Treasury Branch, Mumbai.
- An Integrated Global Treasury Solution has been implemented in UK, UAE, Bahamas, Bahrain, Hong Kong and India.
Technology is an integral part of banking. Right from sourcing and acquiring the customer to servicing and delighting the customer, bank depends upon technology. Technology needs to be leveraged to make the Bank’s routine operations cost-effective. To achieve this, the Bank has engaged the services of McKinsey & Co. to advise it on Business Process Re-engineering and Organizational Restructuring so that its branches can devote maximum time to sales and marketing functions and handle the newly acquired business in an effective manner. The newly created robust technology platform would also facilitate supervision and control and building up of rich management information system to aid the business decision making.

7.5.4 State Bank of India

- **Origin**: 1806
- **Branches**: 14816
- **Business**: Rs.2248.38 lac crore
- **ATM**: 32752 (SBI Group)

Information Technology

- SBI provides a process to manage the availability of the applications, database, systems and hardware. Escalation Management SBI provides a process to escalate problems to resolution.
- SBI provides a process to take high priority fixes from the development team and apply them in a predictable amount of time.

Software Industry Future

- Managed and maintained to industry standards
- Certified configurations with integration throughout the entire technology stack.
- Third party applications part of certified configurations
- Defined solid Change Control Policies
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- Created solid Configuration Management
- Dedicated experts available 24x7 by 365 to resolve and proactively identify service interruption.

100 percent of the SBI business is computerized. Technology upgradation has various components such as video-conference facilities linking Chairman and managing directors to 14 circles. Another significant component is linking of rural branches using the "hub and spoke method", creation of the electronic payment gateway, and inter-office reconciliation (e-recall). Then there is the 'electronic learning project', where State Bank India Institute of Communication and Management (SBIICM) has a crucial role to play.

The bank also planned a tie-up with retail consumer goods outlets, and the Railways. It was hopeful of offering railway reservations through a combination of Internet and ATMs. Demonstrations were over for a smart card operations tie-up with IOC.

**Capacity Management:**
- SBI provides a process to insure, on a periodic basis, there are adequate hardware and software resources to deliver a specified level of application performance.
- SBI has a process to add and shed infrastructure (computers & people) as load increases and decreases.

**State Bank Provide the following “Mobile Banking” Services**

The service is available on java enabled /Android mobile phones (with or without GPRS) where the user is required to download the application on to the mobile handset. The service can also be availed via WAP on all phones (java/non java) with GPRS connection. The following functionalities are available:
• Transaction limit per customer per day is Rs.1,000/- with a calendar month limit of Rs.5,000/-. However, customers desiring to transact up to Rs.5000/- per day or Rs.25,000/- per month may do so after obtaining a One Time Password (OTP)
• All customers can avail the Service irrespective of telecom service provider.
• The Service is free of charge. SMS cost will be borne by the customer.
• As a matter of abundant precaution, Customers are requested to delete all the messages sent to the number 9223440000, once the response for their request has been received.

Mobile Banking Service over USSD (Unstructured Supplementary Service Data) is available on all phones (Java/non Java) with/without GPRS connection. No need to download the application.

**The following functionalities are available:**

• Enquiry Services (Balance Enquiry/Mini Statement)
• Mobile Top up
• Funds Transfer (within Bank)
• All Current/Savings Bank Account holders in P segment are eligible.
• Transaction limit per customer per day is Rs.1,000/- with a calendar month limit of Rs.5,000/-
• The Service is available for subscribers of select telecom operators only.
• The Service is free of charge. USSD session charges will be borne by the customer.
• The service is session based and requires a response from the user within a reasonable time.
Inter Bank Mobile Payment Service (IMPS)

Now you can send/receive money using mobile number and an additional 7 digit MMID number. The benefits are multiple: Only Mobile Banking customers can remit money under IMPS. However, all customers can receive funds in their accounts using this Service. If you wish to receive funds through IMPS, please register your mobile number with the Bank and get 7 digit MMID. For receiving remittance, you will share your mobile number and MMID with the person sending money (remitter). All our mobile banking customers are issued 7 digit MMID for the primary account registered. For obtaining MMID for other accounts, they may visit the Branch and apply for MMID by filling up a form. You can also generate MMID for all your accounts enable for Mobile Banking Service, through menu option-IMPS- Generate MMID.

Customers not registered for Mobile Banking Service can register their mobile number at SBI ATM to get MMID for the primary account linked to the ATM card: Customers not having ATM card / Customers having more than one account, can visit their Branch and apply for MMID, by filling up a form. 7 digit MMID number will be sent to you over SMS on the mobile number used for registration. Customers using the Application based service may please follow the steps as under:

The customers using the USSD based service may choose the IMPS option 7 after successful login and respond as follows:

- Enter the Mobile No of the payee
- Enter the MMID of the payee
- Enter the purpose
- Enter amount
- Enter the MPIN and complete the request

Customers using the SMS Banking can send the message using the following key words to 9223440000 for making a funds transfer through IMPS.