Technology Trends in the Banking Industry

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Roadblocks to Creativity (Killer Phrases)

- “It simply won’t work.”
- “Are you sure of that?”
- “You can’t be serious.”
- “It’s against our policy.”
- “Let’s shelve it for the time being.”
- “That won’t work in our market.”
- “Let’s think about that some more.”
- “I agree, but...”
- “We’ve done it the other way for a long time.”
- “Where are you going to get the money for that?”
- “We just can’t do that.”
- “Who thought of that?”
- “It’s probably too big for us.”
- “I believe we tried that once before.”

- “We don’t usually do things that way.”
- “It seems like a good gimmick to me.”
- “It’s good, but impractical.”
- “Production won’t accept that.”
- “People will think we’re crazy.”
- “Engineering can’t do that.”
- “You could never sell that downstairs.”
- “But who is going to drive that idea?”
- “OK, but let’s slow down a bit.”
- “I’m afraid there’s precedent in this.”
- “We have too many projects now.”
- “We’ll need more background on that.”
**Indian Banking Structure**

- **Commercial Banks**
  - Public Sector Banks
  - Private Sector Banks
  - Foreign Banks
  - Regional Rural Banks

- **Co-operative Banks**
  - Primary urban coop
  - State and central coop banks
  - Primary Agricultural Credit Societies
  - Land Development Banks

- **Banking Institutions**
  - All India Development Banks
  - State Finance Companies
  - Specialized Institutions
  - NABARD / NHB / EXIM

- **NBFIs**
  - Housing Finance Companies
  - Non - Bank Finance Companies

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**Government Owned**

- Multi Layered Structure
- Ongoing Banking Transformation
  - Alliances (Corporation / OBC/ Indian Bank)
  - Consolidation (BOP / Centurion / LKB, IDBI / IDBI Bank, GTB / OBC)
  - Evolving Foreign Ownership / FDI Norms
  - No geographic, INR restrictions
  - Foreign Banks branch license needed

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Ref: Bank of America
Move Towards Technology & Electronic Clearing Environment

Client Needs
- Expedite the collection of receivables from across the country
- Electronic banking interfaces to automate disbursements
- Implement efficient account structure for concentration of funds
- Minimize excess cash and overdraft balances
- Sound MIS for effective planning and decision making
- End-to-end integration with bank’s interface & ERP systems

Key recent initiatives by Reserve Bank of India (RBI):
- Real Time Gross Settlement (RTGS)
- National Electronic Fund Transfer (NEFT)
- Cheque Truncation (Cheque 21 equivalent) – Pilot testing
- National Settlement System (NSS)

Electronic banking solutions gaining recognition due to:
- Automation
- Improving telecom networks
- Rapid restructuring programs

Ref: Bank of America
Electronic Payment Systems

BENEFITS

- **Predictability of Cash Flows**:
  - Clients know when their accounts debited or credited
- **Increased efficiency**:
  - Lower transaction costs
  - STP results in fewer errors, quicker processing
- **Economic Factors**:
  - Fast, secure and irrevocable settlement of major business and financial market transactions
  - Robust, modernized payments system

RTGS

- **Real Time Payment Settlement**:
  - Payments made on real-time and transaction by transaction basis
- **Gross Settlement**:
  - Continuous settlement without netting
- **Lower Risk**
  - No Credit Risk: Payments settled instantly, no end of day procedures
  - Reduced Systemic Risk: Intraday Finality

NEFT

- **Net Settlement System**
  - Netting positions of clearing participants
- **Facilitates paperless inter and intra bank settlements, both inter and intra city**
- **There is no Maximum value limit for an individual NEFT transaction.**
- **Available for one to many electronic settlements**
Changing Scenarios in Banking

- Successful transformation to a sales culture
  - Branches as "stores"
  - Emphasis on sales at all levels of the organization
- Focus on “Customer Experience”
  - But is it only a friendly banker that is enough?
- Shift from Brick & Mortar concepts of banking
Present Scenario

- Growth in the service sector
- Profitability and importance of rural sector
- Technology required to serve the Semi Urban and Rural sector yet to be identified
- Increased disintermediation and its implications
- A few bad apples - Co-operative banks
- Growth of Retail Lending
  - Skill of sanctioning loans
  - Marketing and Product Development Skills
- Capabilities needed for success in Retail Banking
- Banks need to Modernise and Expand network
- Middle of paradigm shift - Universal Banking
• New channels of distribution
  ❏ ATM
  ❏ Internet Banking
  ❏ Telephone Banking
  ❏ Anywhere Banking

• Card Culture
Internet Banking

- Examples of retail and fiduciary products and services include:
  - Balance inquiry
  - Funds transfer
  - Downloading transaction information
  - Bill presentment and payment
  - Loan applications
  - Investment activity
  - Other value-added services

- Examples of wholesale products and services include:
  - Cash management
  - Wire transfer
  - Automated clearinghouse (ACH) transactions
  - Bill presentment and payment
Internet Banking - Issues
Risks of Internet Banking

- **Credit Risk**
  - Customers can reach from anywhere
  - Challenging for institutions to verify the bonafides of their customers, which is an important element in making sound credit decisions
  - Verifying collateral and perfecting security agreements also can be challenging with out-of-area borrowers

- **Interest Rate Risk**
  - Need for managers to maintain appropriate asset/liability management systems, including the ability to react quickly to changing market conditions

- **Liquidity Risk**
  - Increase deposit volatility from customers who maintain accounts solely on the basis of rate or terms
• **Price Risk** - risk to earnings or capital arising from changes in the value of traded portfolios of financial instruments
  - Banks may be exposed to price risk if they create or expand deposit brokering, loan sales, or securitization programs as a result of Internet banking activities

• **Forex Risk**
  - Accept deposits from non residents or create accounts denominated in foreign currencies
Risks of Internet Banking (contd.)

- **Transaction Risk** - current and prospective risk to earnings and capital arising from fraud, error, and the inability to deliver products or services, maintain a competitive position, and manage information
  - Intrusion of the systems, attacks etc.
  - Unreliable services, inability to meet customer demands

- **Compliance Risk**
  - Most Internet banking customers continue to use other bank delivery channels
  - Banks need to ensure synchronization between disclosures on Internet banking channels, including Web sites, and other delivery channels to ensure the delivery of a consistent and accurate message to customers
Risks of Internet Banking (contd.)

- Strategic Risk - current and prospective impact on earnings or capital arising from adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes
- Reputation Risk - current and prospective impact on earnings and capital arising from negative public opinion
Risks of Internet Banking (contd.)

- Technology Risk
  - Redundancy
  - Bugs
  - Hacking / Unauthorized access
  - No human interface
    - Unknown customer
    - Unknown banker
Risks of Internet Banking (contd.)

- **Routers:** Act as Firewalls

- Increased processing, implementing more complex rules.
- Elaborate Logging and report generation
- Standard logging includes statistics on packet types, frequency, and source/destination addresses
- Reports based on usage, individual statistics, group statistics

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127.32.7.20/32
FTP SERVER
PORT 20/21

127.32.7.21/32
E-MAIL SERVER
PORT 25

127.32.7.22/32
NEWS SERVER
PORT 119
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Trends

- More stress on e-money, plastic money and internet based delivery channel
- Lower credit to manufacturing and productive sector Higher growth in housing, auto loans etc.

Electronic money is broadly defined as
- an electronic store of monetary value on a technical device which may be widely used for making payments to undertakings other than the issuer
- without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument
Understanding Systems

- Transaction Processing Systems
- Management Information Systems
- Decision Support Systems
- Expert Systems
Framework Based on IT

- On-Line Transactions Processing (OLTP) –
  - Refers to immediate automated responses to the requests of users
  - Designed to handle multiple concurrent transactions
  - Plays a large role in electronic commerce applications
  - Handles vast amount of data but of little importance to managers
  - Automate handling of data about business activities
  - Data validated and stored for later aggregation
  - Usually provides standard summarization of transactions
  - Summaries of data are often useful
Framework Based on IT (Contd.)

• Management Information Systems
  - Takes relative raw data through a TPS and converts into meaningful aggregated form
  - Needed mostly by Managers to conduct their responsibilities
  - Calls for good understanding of what kind of information Managers require
  - Many Managers do not know what information they need
  - Often dependent on TPS
Decision Support Systems

- Designed for decision makers
- Unlike MIS which provides summary of data it provides interactive environment
- Enables decision makers to quickly manipulate data and models of business operations
- Composed of database (TPS or MIS), User interfaces
- Uses ‘What if’ scenarios
- Development of DSS does not follow a formal project plan – rather prototype and then iterative development is followed
Framework Based on IT (Contd.)

- **Expert Systems**
  - Attempts to codify and manipulate knowledge rather than information
  - ‘If-then-else’ rules
  - Provides expert advice by asking users a sequence of questions dependent on prior answers
  - Provides for recommendations and conclusions
Need for Better Customer Service

- Bad customer service experiences can translate to lower balances for banks
  - Service-recovery processes are the key
- Institutions should start by examining the everyday events that most affect, for good or ill, a customer's perception of them
- Identify the "moments of truth"
  - They represent important opportunities for banks to assess their customer service capabilities and to ensure a proper alignment of investments with customer needs
  - Studies indicate that mass-market customers are less punitive than mass-affluent customers

Marukel Nunez and Corey M. Yulinsky (McKinsey)
Definition of Customer Service

- Customer service is the **ability** to provide a service or product in the way that it has been **promised**
- Customer service is an organization's ability to **supply** their customers' wants and needs
- Customer Service is any contact between a customer and a company, that causes a negative or positive **perception** by a customer
- Customer service is a **process** for providing competitive advantage and adding benefits in order to maximize the total value to the customer
- Customer Service is the **commitment** to providing value added services to external and internal customers, including attitude knowledge, technical support and quality of service in a timely manner

**One single definition of customer service does not exist**
**It is an activity performance measurement and a philosophy**
Issues in Customer Service

• Instances causing Customer’s Grievances
  - Delay & inaccuracy in putting through transactions
  - Delayed / inadequate correspondence
  - Delayed, faulty and unhelpful decision making
  - Lack of counseling
  - Lack / absence of meaningful of banker-customer interface
  - General Attitude

• Major Areas of Grievances
  - Bill Business, Collection of cheques
  - Misbehavior and harassment 0 bad customer service
  - High / Hidden bank charges and low interest
  - Delay in remittance / transfer of funds / transfer of A/Cs / completion of passbooks or statement of A/Cs
Customer Service Issues of Indian Banks

- Diversified Customers
  - High Networth Individuals
  - Financially excluded groups / individuals
  - Corporate, Business Entities
  - Faceless customers

- Diversified Technology
  - Web-based tools and applications
  - Integrated banking solutions

- Diversified Services
  - Traditional activities – Deposits, Loans & Advances
  - Value Added Services – Mutual Funds, PMS, Insurance, Credit Cards etc.
Customer Service Issues of Indian Banks
(contd.)

• Difficulty in accessing the services
• Difficulty in understanding the services
• Opaqueness in the systems and procedures
• Discrimination between one customer type and the other
• Decreasing bondage between bank personnel and customers
• Inadequacy of customer education efforts
Addressing the Issue

- Need for appropriate CRM in banks
- Regulatory Initiatives
- Banking Sector Initiatives
Guiding Principles of Effective Customer Service Delivery

- Embrace change and persistently strive to improve (be a learning organization)
- Continually ask the target customers what they want and then give it to them
- Empower, support, and reward frontline personnel
- Harness the power of information
- Establish an enabling infrastructure
Developing & Implementing Effective Customer Service Strategy

• Identify the Target Customer
  - Cluster or segment target customers based on their common behaviors
  - Determine the priorities of various clusters of customers
  - Discourage non-target customers, those who are not likely to be satisfied by the services

• Determine What Customers Want
• Establish an Organizational Culture Supportive of Customer Service
  - Establish the company’s customer-focused vision
  - Continually reflect on the vision and goals and the way services are delivered to customers
  - If the organization does not implement both internally and externally oriented service strategies consistent with the vision, the organization will have good intentions but poor customer service
Developing & Implementing Effective Customer Service Strategy

- Implement an Externally Oriented Strategic Service Concept
  - externally oriented strategic service concept establishes how the organization’s service is designed, marketed, and delivered to target customers
- Implement an Internally Oriented Strategic Service Concept
  - Establishes how the organization’s internal processes will support the customer-focused vision
  - premise behind the internally oriented strategic service concept is "...capable workers who are well trained and fairly compensated provide better service, need less supervision, and are much more likely to stay on the job. As a result, their customers are likely to be more satisfied..." (Harvard Business Review, 1994, p 72)
Goal of CRM

- Provide better customer service
- Cross sell products effectively
- Help sales staff to close deals faster
- Simplify marketing and sales processes
- Discover new customers
- Increase customer revenues
- Monitor customer churn
Evolution of CRM

Three phases

- Technology
  - Initially CRM meant automation of processes
  - ROI was meager
- Integration
  - Cross-functional integration supported by Data warehouse etc.
  - Example - Web hits, sales call helped in developing customer needs
  - Predictive modeling through data mining of aggregate of customer contact experience and corporate knowledge
- Processes
  - Organizations eliminated unnecessary activities to improve quality and effectiveness of customer service
Fourth Phase

- **Customer Driven CRM**
  - Focus on financial result
  - Finding cost effective alternatives for non-buyers or low-margin customers
    - Not all customers are profitable (but they need not be excluded – Financial Inclusion)
Regulatory Initiative

- Focus on common man
- Need felt for customer education, customer empowerment
- Need for evolving standards for bank services to the common man and depositors
- Need for measuring institutional gap in the performance of the banks against certain codes and standards
• R. K. Talwar Committee (1975)- Studied the quality of customer service in banks
• Goiporia Committee (1990) – Focused in areas of improvement of customer service by banks
• Narsimhan Committee (1991) – ushered in the financial sector reforms which spurred competition in the banking sector through deregulation
• Committee on Procedures and Performance Audit on Public Services (CPPAPS) – Tarapore Committee

- Inform customer upfront about minimum balance, charges etc.
- No frills account – Minimum balance is ‘nil’ or very small
- Minimise hardship to depositors
- Information sought under KYC need not be utilised for cross-selling purposes
• Revised Banking Ombudsman Scheme 2006
  □ Enlarged in extent and scope to cover redressal of grievances against
    ▪ Deficiency in banking product / services including loans and advances, credit cards, delay in payment or collection of cheques, non-adherence to banking hours
    ▪ BO works as an arbitrator in respect of any dispute

• Fair Practices Code of IBA
  □ Model code of IBA
    ▪ Covers lenders liability, depositors’ interest
Formation of BCSBI – The philosophy

- Competitive forces alone do not ensure expected fair treatment, quality, justifiable price and transparency of Banks’ service to customers
- Statutory Regulatory measures set out in letter but not carried out in spirit
- Instructions and guidelines observed more in breach than in compliance
- For addressing these issues along with other issues related to Customer Service RBI set up Committee on Procedures and Performance Audit on Public Services (CPPAPS 2004) with Shri S. S. Tarapore as Chairman
- CPPAPS suggested setting up of BCSBI
- Existing institutional structures
  - The Scheme of Banking Ombudsman
  - Need for a Self Regulatory Organisation (SRO)
Banking Codes and Standards Board of India (BCSBI) – Announced by Governor in his Monetary Policy Statement of April 2005
- To ensure comprehensive code of conduct for fair treatment of customers

Objective of BCSBI
- Promote good and fair banking practices by setting minimum standards in dealing with customers
- Increase transparency
- Encourage competition to achieve higher operating standards
- Promote fair and cordial relationship between customer and its bank
- Foster confidence in the banking system
• Customer Service Department
  - Constituted by notification dated July 01, 2006
  - For protection of customers’ rights, enhancing the quality of customer service and strengthening grievance redressal mechanism in banks and in the Reserve Bank of India
• Customer Service Department
  - Functions of the Customer Service Department would include:
    - Dissemination of instructions / information relating to customer service and grievance redressal by banks and Reserve Bank of India
    - Overseeing the grievance redressal mechanism in respect of services rendered by various RBI offices / departments
    - Administering the Banking Ombudsman (BO) Scheme
    - Acting as a nodal department for the Banking Codes and Standards Board of India (BCSBI)
    - Ensuring redressal of complaints received directly by RBI on customer service in banks
    - Liaison between banks, Indian Banks Association, BCSBI, BO offices and RBI regulatory departments on matters relating to customer services and grievance redressal
Need to Treat Customers Fairly

- Ensuring reasonableness of bank charges
  - Obligatory for banks to display details of various service charges in a prescribed format
  - Need for banks to have a 'Fair Practice Code'
- Institutional Mechanism for Customer Service
  - Customer Service Committee at Board Level
  - Each bank to have a nodal department / official for customer service at HO
- Financial Inclusion
- Need for Customer Education efforts by banks