Banking Functionality

Liabilities:
Saving Deposits, Current Deposits, Term Deposits, Fixed Rate Deposits, Floating Rate Deposits, Flexi Deposits (Sweep facility), Recurring Deposits, Flexi Recurring Deposits, Daily/Pigmy Deposits, Call Deposits, Third Party Financial Products e.g., Sale of Bonds or Insurance Policies. Parameters for minimum/maximum period, Interest Rates by Period, Scheme & Customer Pattern, Minimum & Maximum amount, Auto-Renewal, Pre-mature Withdrawals, Sanctioned Withdrawals, Limit against Deposits, Slab wise or Weighted average of interest rates for over draft against Term Deposits.

Assets:
Personal Loans, Retail Loans, Corporate Term Loans, Demand Loans, Continuous Loans i.e. Cash Credit & Overdraft, Agricultural Loans, Loans through credit Societies or SHG. It supports fixed installments, equated installments or uneven installments, repayment schedules, Advance Recovery, Written off, Multiple PLR linked Interest Rates, Interest Rates pick-up by purpose, security, amount & customer category, Maintenance of details of primary securities and collaterals, Insurance details, guarantors' details, documents obtained and their validity and so on.

Customer & Accounts:
Unique Customer ID, KYC Norms, Black Listed Customer, Multiple customer types, Full Customer Information System, Customer group ID, Account opening link to a customer, Account opening process at Branch, Search on customer and accounts, Customer Alerts. Customer gradation for flash message as well as charges pattern.

Limits:
Bank's total limit Cap, Bank Credit Lines, Customer Credit Lines under Bank’s Credit Lines, Customer Limits under Customer Credit Lines, Funded & Non-Funded Limits, Credit Lines Link to purpose and / or Securities and / or Industry or Activity.

Securities:
Bank's Exposure Limits on type of Securities, Customer Global Security Lines, Account Native Securities, Details of Security as per purpose and nature.

Asset Management:

Transactions:
Teller, transfers, clearing, government tax payments, utility bill payments, issue of draft and banker's Cheques, Electronic Fund Transfers, B2B and B2C support etc.

Single Window Concept:
It supports Single Window concept as well as maker & checker concept and both can coexist as per monetary limits. Supports instant cash receipt or advice printing.

Inland Trade Finance:
Bank Guarantees, Letters of Credit, Solvency Certificates, deferred Payment Guarantees, Outward bills, Inward Bills, Bills Purchase & Discounting etc.

External Remittance's Arrangements:
SWIFT support, Inter-bank Network support, Constituent Bank Arrangement support, RTGS.

Customer Services:

House-Keeping:

Processes:
FDOD activation, Valuation of Securities & DP adjustments & intimation to parties, Loan Disbursement Schedule, Loan Repayment Schedule, Re-scheduling, Securities & Collaterals’ Collection, TDS deductions to payment, MICR Clearing Lists’ preparation-despatch-merging, cheque-books & other stationery stock - issue-despatch-acknowledgement

Straight -Through Processing:
Clearing list from customer, Inward Clearing List from Clearing House, Bills for Collection list, Demand Drafts/PO issue Lists, Transfer Lists (like salary payments, dividend payments), Daily Deposits' Lists from hand-held devices, Bulk Account Opening.

Manager's Choice:
Customer Alerts, Branch Profile, Customer Exposure, Snapshot view of customer, Snapshot view of day's working, Exceptional Reports.

Customer communication:

Calculations:
Interest, Charge, Pre-matured Withdrawal support, EMI, Repayment Re-working, Margin & DP, Maturity value.

Calculation methods highly parameterized:
Choice of over 100 types of charges. Charges linked to amount, period, volume, customer type and so on. Cumulative and non-cumulative interest. Periodical rest as per parameter. Choice out of multiple methods of Credit, Debit, Penal, Late Interest.

Time Cycle Support:
Interest, Charges, Year-end, Day end, Day begin, Data purging, Backup. It Supports value dating & mercantile System of Accounting.
Banking Functionality

Islamic Banking
Retail/Corporate, Mudarabah Deposits, Consumer Murabaha, Ijara Financing, Salam, Istisna, Tawarrug, Sukuk, Musharakah, Bills and Collections, LC and Guarantees, Qard.

Central Bank Banking

Special Features

The solution supports many special features and options as under:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-lingual Support</td>
<td>Since this solution is browser based &amp; Unicode Compliant the front end can be changed to suite any language, supported on the respective platform</td>
</tr>
<tr>
<td>Multi currency Support</td>
<td>The solution supports multi currency for financial statements</td>
</tr>
<tr>
<td>Multi Server Environment</td>
<td>Supports multi server environment</td>
</tr>
<tr>
<td>Multi-Delivery Channels</td>
<td>24x7 delivery channels can be integrated at Enterprise Level</td>
</tr>
<tr>
<td>Disaster Recovery Management</td>
<td>It supports Disaster Recovery Management Norms, Unique Options</td>
</tr>
<tr>
<td>Network Control Management</td>
<td>It supports control of Network in terms of Authorized Entities, Authorized Users &amp; Authorized Terminals or Devices etc</td>
</tr>
<tr>
<td>Security Management</td>
<td>It supports various application level standards on Security</td>
</tr>
<tr>
<td>Customer Types</td>
<td>It supports multiple customer types, customer grouping and gradation. The Service accessibility and charges depend on such gradation</td>
</tr>
<tr>
<td>Service Branch</td>
<td>It supports service branch handling of clearing operations</td>
</tr>
<tr>
<td>New Banking Products</td>
<td>New launches can be easily configured as the solution is highly parameterized.</td>
</tr>
<tr>
<td>Unique Access Control</td>
<td>It has unique concept of hierarchy-based -ID and password for delivery channels</td>
</tr>
<tr>
<td>Maker Checker Concept</td>
<td>For 100% operations. Highly parameterized</td>
</tr>
<tr>
<td>Bank Account Opening</td>
<td>It supports bank account opening</td>
</tr>
</tbody>
</table>

Cheque Truncation Solution
Clearing House / Participating Bank

Any Bank Banking
Financial Switch for Inter Bank Operations

Forex Solutions
Forex Dealers, High-tech Solutions

Financial Inclusion
End-to-End Solution & Service

Branchless Banking
Total Branch client on a Mobile Device, 24x7 Online to CBS
Customers

Enables banks offer complete flexibility to their clients to access and operate their accounts from any branch and enjoy the facilities of Banking Anywhere. Various functionalities available across the branches are:

Cash Anywhere
Pay Anywhere
Collect Anywhere

Multi-Branch Banking

Enables banks offer complete flexibility to their clients to access and operate their accounts from any branch and enjoy the facilities of Banking Anywhere. Various functionalities available across the branches are:

Multi-Branch Banking

Multi-Currency Trade Finance & Forex

Multi-currency Trade Finance operations
Export Bills & L/C, packing credit, Inward Remittances, Import Bills & L/C, Outward Remittances, Forward Sales & Purchase Contracts & Reports, SWIFT Interface

Forex transactions
Currency Sales, Purchase and Exchange, Traveling cheques and instruments Also, Multi-currency deposit accounts
Dealing Room Activities
Contracts, Transfers, Nostro Accounts etc., SWIFT Support

Investments & Government Securities
Includes ROI calculations and Cost to yield calculations, Repo & Reverse Repo, FIMDA, Decision Making.

24 x 7 Delivery Channels

Internet Banking
Customers can browse through bank's website for queries. Hierarchy - based access to transactions

Call Money market Operations
Lending & Borrowing, Interest calculations and 'what if' scenarios

Tele Banking with Fax-on-Demand
An Interactive Voice response to respond to queries ranging from Account entries to various charges. It can also transmit account- statement by fax and lodge stop payment requests.

Primary Markets
Equity, Debentures and Bonds, Mutual Fund, Venture Capital Portfolio.

Investments & Government Securities
Includes ROI calculations and Cost to yield calculations, Repo & Reverse Repo, FIMDA, Decision Making.

Internet Banking
Customers can browse through bank's website for queries. Hierarchy - based access to transactions

Call Center/Phone Banking
Centralized facility to handle customer queries ranging from account entries to various charges.

Tele Banking with Fax-on-Demand
An Interactive Voice response to respond to queries ranging from Account entries to various charges. It can also transmit account- statement by fax and lodge stop payment requests.

ATM & POS: Switch Interface
Confirming to ISO 8583, it connects with ATM Switch. Supports Card Management.

Mobile Banking
Customers can send pre-defined SMS messages and receive replies on their mobiles to their standard queries. They can also lodge requests. Mobile Alerts for customers / Staff.

Touch Screen/Lobby Banking
This is a self-service terminal to view accounts and it supports statement printing as well. Access Control through Password, Smart-card, Biometric

Banking Product Basket

Web Based
Core Banking System

GUI Banking
For Banks/ Credit Societies/
Micro Finance Institutions

Forex Management

Treasury Management for
Banks/FI/NBC

Any Branch Banking
for non web-based Banks

ISO - 8583 Switch
for Bank/FI

Credit Appraisal &
Monitoring System

Cheque Truncation System
Bank/Clearing Corporation

Mobile Banking

Back Office Management
for Banks/ FI

Legal Suit &
File System

Reconciliation
Centralized Core Banking Solution (CBS)

Either at Bank premises or at VSTL side (ASP)

DATA CENTER
- Application Server
- Database Server
- Internet Banking Server
- Call Center / Phone Banking
- ATM Interface
- Mobile Banking Server
- Key Board & Monitor
- Network Switch

Fire Alarm System
CCTv Camera
Electronic Door Lock

WAN Connection between DC & DRS

Either at Bank premises or at VSTL side (ASP)

DR Site
- Application Server
- Database Server
- Internet Banking Server
- Call Center / Phone Banking
- ATM Interface
- Mobile Banking Server
- Key Board & Monitor
- Network Switch

Fire Alarm System
CCTv Camera
Electronic Door Lock

Connectivity Layout

Head Office
- Data Center Networking Rack

Branch
- Router
- Firewall
- Internet Service Provider
- Internet Cloud
- Broadband Internet
- RF Connectivity

Node 01
Node 02
Node 03...
Node (n)

Leased Line
BSNL

Internet Provider

Leased Line
BSNL

Data Center Networking Rack
Centralized Core Banking Solution (CBS)

Security

Audit Trail:
- History maintenance for user creation / changes, parameter modification, master creation / Changes, transaction corrections.
- Printing of audit trail at any time on selective basis also

Database Control:
- Data integrity check-mandatory in the day end-any time optional.
- Locking of entire database-even if unlocked by DBA, cannot be locked back and resumed.
- Validation of data inputs-constraints on field level
- All critical data under encryption-Triple DES
- Triple authorization for control parameters or user changes
- Data integrity of Subsidiary v/s General Ledger

Communication level:
- Within Intranet, it works under SSL encryption on Browser, running on IP.
- For all other communication on WAN under Public-Private key encryption.

Functionality Level:
- It incorporates Maker & Checker concept for every functionality
- Supports single window concept
- Facilitates dual or triple authorization too
- Over 100 types of exceptional reports
- Manager's control window
- Parameters relating to banking rules, under HO Command.

Crisis Management

Crisis related to Server:
- Main database on RAID.
- Stand by Server for database.
- Multiple application Servers to take care of crisis & load balance.

Disaster recovery site:
- At suitable distance from the main installation, under online connectivity.
- Under replication with central database recovery site.
- External backup also to be provided.

Data Integrity:
- Application Maintenance full consistency of operation, ensuring the completion of full transaction
Database Management

- Real time update at both, primary and secondary database servers, using SQL Mirroring / Oracle Data Guard
- Support storage area networks (SAN)
- History of database for MIS

Platforms

- CBS Solution is built on 3-tier architecture
- It is browser-based and compatible with IE, Netscape Navigator, Mozilla Firefox and so on.
- Development tools are Microsoft ASP.NET 2005, JavaScript And Business Object 11.5
- The Application Server is IIS web Server on MS Windows 2008
- It is ODBC compliant and it can work with Oracle Or MS SQL

Back Office Suite

This Account-based MIS solution meant for Back Office is largely based on Bank's Assets (Loans & Advances) as well as Liabilities (Deposits), Expenses & Incomes. The major modules are:

- Statutory Reporting
- Management Information System (MIS)
- NPA Management

H. O. Suite

- Reconciliations
- Membership & Dividends
- Human Resource Management
- Payroll
- Stationary / Inventory
- Fixed Asset Management
- Investment / Treasury Management
- Content Bank
- Admin
- Credit Appraisal & Monitoring System (CAMS)
- Suit File System (SFS)

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