Transform your retail banking strategy by cutting through legacy

FLEXCUBE®, i-flex’s core banking solution
Moving away from silos

Fueled by the evolving business landscape, and the growing competition, financial institutions today are realizing the need to adopt core banking technology that can empower them. Banks are looking to transform strategically, and simultaneously leverage day-to-day operations. Of prime significance is a core banking system comprising self-contained services, over which systems can be easily constructed, and then orchestrated into a complete solution.

The need for a next-generation core banking solution

Replace legacy systems to cater to new market expectations. Adopting a next generation core banking solution can help your bank innovate and cater to your customers’ changing requirements, increase efficiencies, and reduce operational costs across your bank, while improving customer retention. This core system would ideally improve productivity, enable higher processing speeds, and closely align with your bank’s overall business strategy.

Increased levels of competition as new entrants in the market come out with innovative products to challenge existing players. The right core banking solution can help your bank to not only innovate, but also achieve economies-of-scale, ensuring that they are able to compete in dynamic and diverse markets.

An evolving regulatory regime.

Adopting the use of the right regulatory platform to ensure compliance with numerous regulations such as Basel II and SOX, can help your bank alleviate costs and improve reusability, turnaround times and accuracy.

Streamlined flow of information.
The right technology will go a long way in ensuring the smooth flow of information at your bank, and eventually lead to efficient decision-making processes.

Customer experience management.

Like most banks, your bank also wishes to target specific information at customers, and leverage a unified, actionable view of customer experience. Most product innovation today is strongly driven by this parameter.

The move towards Service-Oriented Architecture (SOA). It is becoming increasingly important to have a flexible, robust, future-oriented IT architecture, based on SOA to support integration and consolidation activities. With SOA, your bank can increase operational efficiency, enhance service quality, and improve risk management and regulatory compliance.

FLEXCUBE®, transforming banks with next-generation technology

i-flex® solutions brings you FLEXCUBE, its core banking solution chosen by over 330 financial institutions in over 115 countries. It is the next generation core banking solution tailor-made to help your bank achieve present and future goals.

A comprehensive, integrated-yet-modular core banking solution, it can cater to your bank’s needs and multiple business segments. With FLEXCUBE, your bank can effectively meet challenges of reducing operational cost and establishing customer intimacy. FLEXCUBE can enable your bank to reduce the time to market for new products, thereby staying ahead of the competition, and fulfilling compliance mandates. Your bank can also manage higher transaction

Figure 1:

<table>
<thead>
<tr>
<th>Customer Intimacy</th>
<th>Competitive Differentiation</th>
<th>Compliance to regulation and risk management</th>
<th>Cost Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral analytics</td>
<td>Faster product launch</td>
<td>Quicker adaptability to compliance change</td>
<td>Open architecture</td>
</tr>
<tr>
<td>Customized product offerings</td>
<td>Wider market reach</td>
<td>Comprehensive customer audit and KYC</td>
<td>Lower TCO</td>
</tr>
<tr>
<td>24x7 SLA based response</td>
<td>Security</td>
<td>Fraud detection</td>
<td>Quick deployment &amp; launch</td>
</tr>
<tr>
<td>Predictive</td>
<td>Faster entry into new geography</td>
<td>Front to back integration</td>
<td>Scalable</td>
</tr>
<tr>
<td>User Friendly</td>
<td>Privacy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enabling Technology Platform
Focus on your core business objectives with FLEXCUBE

Implementing FLEXCUBE will enable your bank to reduce cost through Straight-Through-Processing (STP) and exception handling. You can build customer intimacy, affording a single view of your customer information, analysis of customer needs, creation and modification of new products, and, solutions based on accurate, up-to-date customer profiles.

In addition to building a long-term relationship with your customers, you can provide relationship-based pricing, offering special benefits and facilities in terms of preferential pricing for interest, charges, commissions, fees, brokerage expense and taxes, based on the overall value of the customer’s relationship with your bank.

Your bank’s regulatory requirements for Basel II and anti-money laundering have also been addressed through a highly secure data management system, which can easily integrate with third-party solutions at your bank.

With FLEXCUBE, you can avail:

- 24x7 processing of large transaction volumes, with the highest levels of availability
- Multiple delivery channel support to reach new customers and market segments
- A powerful and user-friendly Web-based user interface with context-sensitive online help, based on industry standard XML/XSL technology
- Sophisticated security management systems, covering application security and role-based access and user definition
- Scalability to support rapid growth for your M&A initiatives, and manage large volumes of customers and accounts
- Multi-currency processing and multilingual capabilities
- Online validations and automated exception processing, thereby reducing the need for manual intervention at your end
- Centralized, decentralized or combination deployment of various operations, enabling easy adaptation to the optimum business operating model of your bank
- A state-of-art solution architecture that is based on open systems and service-oriented architecture, which reduces technology, operational and personnel costs
- Flexibility of hardware and software platforms, offering you a choice of hardware platforms including IBM systemz Mainframe/Unix and Windows/Unix or hybrid options/Linux with Oracle Database and Oracle Application Server
- Ease of integration, with existing systems by using flexible J2EE technology. A phased implementation minimizes organizational barriers to change, and challenges related to implementation
- A flexible information management system that
Figure 3: FLEXCUBE® Functional Architecture

FLEXCUBE® i-flex’s Core Banking Solution

DELIVERY CHANNELS
- Internet - FLEXCUBE® @
- FLEXCUBE® Branch
- ATM
- POS
- IVR / Call Center
- Mobile Phone
- PDA

FLEXCUBE® INTEGRATION LAYER (WEB SERVICES)

RETAIL PRODUCTS
- Demand Deposits
- Deposits
- Credit
  - Loan Origination
  - Overdrafts
  - Revolving Loans / Cash Cards
  - Term Loans
  - Collections
- Savings Accounts
- Term Deposits
- Recurring Deposits
- Automatic Deposits
- Certificates of Deposit
- Safe Deposit Box

CUSTOMER MANAGEMENT
- Customer Information
- Customer Centric View
- Customer Alerts

RETAIL SERVICES
- Retail Services
- Services
- Sweep
- Standing Instructions
- Direct Debits (D / C)
- Payments
- Utility Payments

RISK MANAGEMENT
- Risk Management
- Decisioning Engine
- Scoring
- Collateral
- Limits
- Non Performing Assets

INFORMATION DELIVERY
- Information Delivery
- Integrated Account Statements
- Debit and Credit Advices
- Tax Statements
- Mails, Emails, SMS and Alerts

BUSINESS SERVICES
- Service Charges
- Relationship Pricing
- Interest Plans
- Tax Controls

OPERATIONAL SERVICES
- Clearing
- Security & Audit Trails
- Inventory Management

TECHNICAL SERVICES
- Business Roles Engine
- API
- Process Orchestrator (BPEL)
- Generic File Upload / Extract Utility

INFORMATION MANAGEMENT SERVICES
- Management Information System
- General Ledger
- Reporting Universe
- User Defined Data Elements
- Pre-Built Reports

OTHER i-flex OFFERINGS
- Corporate Banking
- Investor Services
- Customer Insight Analytics
- Risk & Compliance Analytics - AML, Basel II, Ops Risk
- Performance Analytics

INSTITUTIONAL DELIVERY
- ACH
- SWIFT
- Regulatory Reporting
- RTGS

EXTERNAL SYSTEMS
- Document Management Systems
- Credit Card Systems
- Credit Bureaus
- CRM Systems
generates analytical reports to support management decisions, and creates an integrated general ledger for account consolidation.

- Multiple access channels such as branches, ATMs, point-of-sale terminals, IVR/call centers, PDAs, mobile and Internet banking

- Operational risk management controls, including limits, collaterals and NPA (Non-Performing Assets) management

**SOA for business-specific needs**

FLEXCUBE’s architectural platform has been designed to support agility, and business processes management through i-flex Process Framework for Banking (IPFB™). This is underpinned by a complete BPEL/ SOA/Web services-based model for software configuration. It enables integration of all third-party applications, including a bank’s in-house software, to execute business processes. You can automate your bank’s operations with BPEL, and link them to a large set of Web services within the FLEXCUBE suite.

FLEXCUBE’s Service Oriented Architecture (SOA) seamlessly allows co-existence and integration with all applications running at your bank.

**Retail products supported by FLEXCUBE:**

- The Current and Savings Accounts (CASA) module
- The deposits module supports complete processing of term deposits
- The credit module includes credit offered as loans or as overdraft limits on CASA accounts
- A variety of loan products like personal, housing, car and student loans are supported
- The collections module of FLEXCUBE has comprehensive support for collections and recovery operations
- The safe deposit box module will help your banks to offer customers a facility for safe keeping of their valuables

**Services supported by FLEXCUBE include:**

- Sweeps for linking of customer accounts - thereby, offering your customers a convenient and effective tool for managing funds
- Standing instructions that automate the periodic processing of customer instructions
- Direct debits/credits offering a safe, efficient and reliable method for paying utility bills, and making credit card payments

- Payments module for processing all types of incoming and outgoing funds transfers. This module also supports multi-party, multi-currency transfers, via multiple media such as mail, Telex and SWIFT
- The utility payments module, allowing your bank to offer ‘across-the-counter’ bill payment services to customers/ non-customers

**FLEXCUBE, creating future-ready banks**

A core banking solution must necessarily be technologically strong and serve future business objectives. Here emerges the strength and long-term business viability of a solution such as FLEXCUBE, whose market leadership has been demonstrated time and again by high profile customer wins. FLEXCUBE has proved that it can successfully replace legacy systems and improve banking operations without any loss of existing functionality.

Creating a bank that is focused on the demands of customer experience is well worth pursuing when you have FLEXCUBE.

For more information on how FLEXCUBE can empower your business, visit www.iflexsolutions.com or write to us at marketing@iflexsolutions.com
Business Process Transformation

It is an understood fact that your bank’s choice of a core banking solution is a critical decision that should help you compete more effectively in the market place.

With so much pinned to this technology change, why allow your legacy processes and existing operating model to weigh down your new technology. By simply replicating your existing way of working around the new solution, you may find that you have not been able to fully reap the benefits of your investment. And, what’s more, you could be missing out on an opportunity to bring about significant improvements in your operating strategy and transform your distribution channels.

To leverage the superior technology you have invested in, and to magnify its impact, you need to re-engineer your old processes, question your current operating model, and introduce new capabilities that will keep you ahead of the competition.

The blueprint of your business processes thus is to look not only for today’s business but also for the envisioned way forward. The ultimate goal is to build an operating model that optimizes “everything that is good”.

The answer to the logical question – “How do we proceed?” is – Business Process Transformation.

And that’s where we, at i-flex, with a consulting group that has some of the best business consultants from premier banks and financial institutions worldwide can step in with our Business Process Transformation (BPT) Services.

i-flex - the right choice for BPT

The functional technologist advantage: i-flex is known for its unmatched financial domain expertise, which coupled with our IT roots, gives you a rare advantage of having financial experts who understand technology. The i-flex team comprises extremely talented financial industry practitioners, with years of practical experience from global banks such as ANZ Banking Group, Bank of America, Deutsche Bank, AMEX and HSBC.

• Our insider advantage: Consultants at i-flex have a better understanding and comprehensive knowledge of FLEXCUBE functionality when
Define a business operating model
- Align your bank's operations with your business objectives
- Identify the key components of your business
- Develop a strategy with decisions on centralization, standardization and outsourcing

Re-engineer your business processes
- Reduce cycle time and hand-offs
- Introduce best practices
- Incorporate risk mitigation techniques
- Improve customer service levels

Maximize usage of your new technology
- Align processes with systems to reduce customization costs
- Increase Straight Through Processing (STP)
- Enable maximum feature usage
- Reap the true benefits of new technology

Figure 1: Our Business Process Transformation services assist you in the following activities.

Figure 2: Our BPT methodology.

Figure 3: Measureable improvements.

1. 30% reduction in transaction time per client
- Single-window processing
- Outsourcing of non-value adding activities
- Reduced manual hand-offs

2. 326 man-days saved annually due to multiple recommendations
- 50% reduction in paper usage
- Maximized system usage-reduced human error-risk
- Reduced data & effort duplication

3. $5.5 Mn-Post-BPT projected revenue in 5 years
- Customer profitability analysis
- Reduced manual efforts against increased usage of technology
- Movement of customer to self-service channels
compared to any third party resource. No one can improve and align processes around FLEXCUBE like we can.

- The showcase advantage: i-flex has already demonstrated its capability by successfully completing BPT assignments with large, well-known banks in USA, UK, Canada, Europe and Asia. Some of our assignments are with the largest and premier banks in the world.

**Our BPT methodology**

Our methodology consists of a structured framework and appropriate templates to reduce the complexity of your operations and provide an optimized solution.

If it does not improve what you do, we don’t do it.

**Measurable improvements**

Our clients have seen quantifiable benefits through our BPT services followed by planned implementation of our recommendations.

**Variable options for business transformation**

We understand that banks may not always choose or need to carry out a complete overhaul of their operations, which is why we provide a suite of options to our customers. We also provide customized services such as:

- Business operating model definition
- Enterprise wide BPR
- Single department BPR
- Process alignment with FLEXCUBE
- Process flow documentation
- Bank-specific FLEXCUBE End User Training Manual (EUTM) preparation
- Document management and storage strategy
FLEXCUBE® deployment options

The FLEXCUBE infrastructure offers several deployment options that enable banks to provide services uniformly across multiple channels.

Decentralized branch deployment has the following advantages:

- Each location has its branch server setup
- Offline transaction support
- Suitable for banks with branches across geographies, especially at locations where the network is unreliable and the connection with the host may be lost frequently

Centralized deployment of branch server has the following advantages:

- Branch database and the host database reside in the same data center
- Centralized control over hardware deployed, and system availability
- Reduces deployment and maintenance costs
- Leads to added security as even the branch server is subject to stringent data center security checks

Deployment of FLEXCUBE host

The host component can be physically thought of in terms of four different layers: The overall host layer within which we have the application server layer, the database layer and the disk layer. Each of these layers has been engineered to be feature rich. These include:

Overall host layer

The FLEXCUBE infrastructure provides for a disaster recovery site (back-up site) to ensure continuity of business in case of unforeseen circumstances. The disaster site has a back-up of all the mission critical servers and ensures that disaster recovery can be performed in a short time, without loss of data. This is accomplished using Oracle Data Guard or SAN replication.
Application server layer:
- Use of dynamic Logical Partitioning (LPAR) on Application Server machines for server consolidation which minimizes maintenance, power consumption and chances of failure
- Use of server machines in a cluster configuration to ensure that no single machine becomes a single point of failure

Database layer
- Use of AIX HACMP to move Oracle 10g servers from primary to secondary CPUs to failover/distribute load across CPUs
- Use of Oracle RAC to spread and load balance database activity across CPUs in LPAR and recover from specific CPU/memory failure points

Disk level
- Use of RAID 1+0 to ensure high availability in case of disk and disk driver failures
Virtual banking is now being seen as a welcome option by many customers. Such customers, who spend a significant amount of time in the virtual world expect banks to serve them. When it comes to service, customers are becoming more and more discerning. Today, they have a wide range of choices available at their fingertips. The trigger for this is the increasing availability of information. Banks therefore have to work hard to stay ahead of competition by rolling out products and services at a faster pace than ever before. Compliance, in a dynamic regulatory environment stretching across geographies, is also a crucial factor. Given such a backdrop, what should banks do to serve virtual customers?

For banks seeking to offer services in the virtual world, we have something that will help them respond quickly and effectively to competitive pressures and changing consumer preferences.

FLEXCUBE® is a flexible, complete Internet banking solution from i-flex® solutions that addresses the challenges of the evolving financial services industry. It provides a robust link between a financial institution’s host/legacy system and its customers, using popular Internet browsers, as well as wireless devices. The system offers a consistent experience through multiple delivery channels, enabling financial institutions to provide reliable customer service.

With FLEXCUBE®, banks can offer customers quick access to account information and easy-to-use online banking services, while protecting their financial data. Integrating FLEXCUBE® with a Website will ensure increased traffic through online transactions, and offer customers 24x7 access to their portfolio, and to the news and promotions from the bank.
FLEXCUBE® equips banks with security, scalability, a tiered architecture, high performance standards, a unified customer view, a uniform experience across channels, co-existence with existing infrastructure, rapid time to market, apart from global functionality such as multicurrency and multilingual support.

The application is supported by a technology framework built on the popular industry standard J2EE architecture, which supports open standards for easy integration with third-party systems and authentication solutions, offering high security and performance.

FLEXCUBE® is a constantly evolving product and optimized for various functional and technical requirements of customers. The application has been audited for superior security standards, as well as performance by an external consultant (Ernst & Young).

### Business Framework
FLEXCUBE® provides a ready suite of solutions that deliver an exhaustive set of banking functions over the Internet. The business application modules cater to a host of domains.

**FLEXCUBE® suite comprises:**
- Retail Internet banking – FLEXCUBE® Retail
- Corporate Internet banking - FLEXCUBE® Corporate

**FLEXCUBE® Retail**
FLEXCUBE® Retail provides an extensive range of retail banking services that enable customers to manage their finances. The services include account operations, standing orders, loans, term deposits, transfers and payments, customer services alerts, online bill payment, mobile banking and alerts.

**FLEXCUBE® Corporate**
FLEXCUBE® Corporate is the online banking product especially designed for corporate organizations. Corporate customers can execute a host of features online without jeopardizing security, and can establish controls and access privileges to suit their organization workflow.
The administration module helps manage employee rights in multiple-user environments. Customers are provided with a facility to handle user management for respective organizations and, thus, provide the bank with an option to let customers manage administrative activities at their end. Further, the system supports the maker-checker feature, incorporating multiple levels of authorizations to fit into the respective corporate workflow, as well as allocation of access rights to specific users, ensuring maximum control.

Corporate banking services like account operations, standing orders, loans, term deposits, transfers and payments, customer services and bulk payments are provided by this application.

In addition to the above modules, the system provides comprehensive administrative features. FLEXCUBE® Core provides the common administration module for user management, access control and various authorization mechanisms.

**A Web-ready suite**

FLEXCUBE® is a ready suite of Web applications in retail, commercial banking, mutual funds, equities trading, bill payments and financial portals. With this application, institutions can focus on expanding their customer base, increasing revenues and operational efficiency, and leave the nitty-gritty of management to FLEXCUBE®.
Most banks typically use multiple systems across functions. These systems tend to work in silos and seldom communicate to each other, leading to data gaps and process inefficiencies.

FLEXCUBE® Connect is a platform for financial applications, which provides a simple, yet highly efficient solution to integrate systems within a complex infrastructure. The solution is a message-enabled Internet-based finance architecture, and is used as an enterprise middleware that links heterogeneous systems.

FLEXCUBE® Connect integrates a bank’s channel delivery with the back-office processing, and other enterprise systems. The application manages transactions between customer touch-points and back-end systems.

Further, this J2SE–J2EE based integration platform allows financial institutions to deploy applications over the Web and other customer contact points, providing multiple options for integration with any other J2EE environment. The integration options use Java Messaging Service (JMS), Web services and Enterprise Java Beans (EJB) invocation.

**FLEXCUBE® Connect features**

1. **Enterprise integration capability** - The FLEXCUBE® Connect application manages the integration challenges through the use of the system’s infrastructure services and integration capabilities of the routing engine.

2. **Service-Oriented Architecture (SOA-based)** – FLEXCUBE® Connect is based on SOA that helps users build composite applications, that draw upon functionality from multiple sources within and beyond the enterprise to support horizontal business processes.

3. **Component driven** – The application architecture creates a transparent hierarchy of components that provide the building blocks. Since, it no longer matters where the applications physically reside, more flexible deployment models become possible.

4. **Rapid deployment** – The application integrates various components and caters to integration requirements, message translations and host connectivity, thus speeding up access to
new services. FLEXCUBE@ Connect offers a rapid introduction of application and IT interconnectivity and of reusable services to SOAs, with less cost and infrastructure complexity.

5. Platform independence - FLEXCUBE@ Connect leverages J2EE to support deployments across platforms.

6. Channel integrator - The channel integration feature provides a single solution to integrate multiple channels within systems to provide a 360 degree view of customer relationship and transactional information within the bank.

Integration modes
FLEXCUBE@ Connect supports different modes of integration, including the following:

File transfer/ exchange
Data integration is performed using a file (batch files) mechanism, typically for offline and batch integration.

Shared database integration mode has:
1. Local database that can be used as a common data store.
2. JDBC adapters for data integration.

Remote procedure invocation enables:
1. Business logic integration using various remote invocation techniques.

2. Online interfacing.
3. API based integration.

Messaging system can be used for:
1. Integration of disparate systems.
2. Synchronous and asynchronous communication for data and business integration.

Conclusion
FLEXCUBE@ Connect constructs an integrated view of the customer information embedded within legacy systems in your bank. Its seamless scalability features can customize solutions based on the needs of the ever-changing enterprise, and ensure that you can use the systems even during planned downtime or server failures.
Abstract

When HDFC Bank started operations, their biggest challenge was the stiff competition from long-established, government banks. The bank needed a robust core banking solution with the ability to handle large volumes of transaction to support quick growth and a range of products, across multiple channels.

Customer profile

HDFC Bank began operations in 1995 with a mission to be a “World-class Indian Bank.” The bank decided to focus on building sound customer franchises across distinct businesses, and become the preferred provider of banking services for retail and wholesale customer segments.

The need for a robust core banking solution

When the bank started operations in 1994, it was faced with a plethora of challenges. Being a start-up bank, it had a relatively inexperienced staff and no existing customer base. The bank was also exposed to fierce competition from large established government-owned national banks, as well as technologically savvy multinational banks.

The bank’s immediate challenge was to decide on a core banking solution based on open, scalable systems that not only gave the bank an ability to handle large volumes and accommodate fast pace growth, but also offered a wide choice of hardware to run on. The solution also needed to align itself with the bank’s plans to deliver products across multiple channels, at the same time, eliminate the impact of geography.

The second priority was that the solutions should also provide an up-to-the-minute MIS that would enable online, real-time management and leverage the dynamic market.

i-flex® solutions – the preferred partner

The bank chose i-flex solutions as its strategic technology partner to
address its complete application software requirements. HDFC Bank today, is using i-flex’s products for almost all of its banking operations.

- **FLEXCUBE®**: FLEXCUBE fulfills the various business needs in the areas of core retail, corporate, investment banking, Internet and mobile banking
- **FLEXCUBE®**: The FLEXCUBE® suite of Internet solutions was deployed to reach customers over the Web channel

**Customer benefits**

The FLEXCUBE implementation enabled the bank to offer the following services:

- Multi-branch banking
- Multi-channel banking – ATM, phone banking, call center, among others
- Complete Internet and mobile banking
- 24x7 service

**Competitive edge**: With FLEXCUBE, the bank can launch new products and provide state-of-the-art banking services at par with multinational banks and, as a result, has been able to capture a significant share of the market. The bank offers many innovative banking products like freedom deposits (no minimum balance), 24-hour cash withdrawal, operation of accounts from any branch. The bank has been rolling out new products, such as multi-branch access, phone banking, ATM cards, call center, Internet banking, utility payments, debit cards, connectivity to shared ATM networks, among others.

**Better returns**: The bank has had an average annual return on equity crossing 20 percent in the past two years.

**Improved productivity**: The bank has centralized most of its back-office operations, and has efficiently organized each branch with just four to six people.

**Efficient manpower deployment**: The bank manages its entire IT operations with minimum staff to serve the needs of the bank round the clock.

**Flexibility**: After HDFC Bank took over another leading retail bank - Times Bank, it carried out the complete data migration very smoothly, in a period of four months.

HDFC Bank today, has become India’s leading private sector bank, handling huge volumes with customer assets equal to INR 896 Billion. With a staff strength of 1343 employees, the bank offers a gamut of banking products and structured solutions to meet all customer needs in the retail, corporate and investment banking segments.

“We believe IT is the competitive weapon for the banking industry. i-flex has provided us with worthy arsenal and helped us reach this leadership.”

Aditya Puri, Managing Director, HDFC Bank

“We’ve excelled in containing the costs of technology to the minimum by choosing appropriate systems, partnering with our vendors and making the best use of current technologies like imaging, middleware and so on, and demonstrated that IT alignment is a very powerful strategic differentiator in the marketplace.”

C N Ram, IT head, HDFC Bank

**Reveleus™**: The Reveleus suite of analytical applications is focused on risk management, customer insight, and enterprise-wide financial performance
# Operating statistics

<table>
<thead>
<tr>
<th>Bank network</th>
<th>839 branches spread over 316 cities across India with over 2734 networked ATMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of customers</td>
<td>More than 12.1 million</td>
</tr>
<tr>
<td>Number of accounts</td>
<td>More than 8.6 million (the bank is growing very rapidly and adding about 1000 new accounts every day on an average)</td>
</tr>
<tr>
<td>Number of concurrent users (peak time)</td>
<td>2000</td>
</tr>
<tr>
<td>Average number of transactions processed per day</td>
<td>More than 4 million</td>
</tr>
<tr>
<td>Number of transactions during EOM</td>
<td>More than 1.6 million</td>
</tr>
<tr>
<td>Total EOM Time (Report Generation Time)</td>
<td>269 minutes</td>
</tr>
<tr>
<td>Average End-of-Month time</td>
<td>Approx. 6 hours</td>
</tr>
<tr>
<td>Batch timing analysis</td>
<td></td>
</tr>
<tr>
<td>Average daily EOD time</td>
<td>Approx. 2 hours, 45 minutes</td>
</tr>
<tr>
<td>Average daily BOD time</td>
<td>Approx. 1 hour, 15 minutes</td>
</tr>
<tr>
<td>Average End-of-Month time</td>
<td>Approx. 6 hours</td>
</tr>
</tbody>
</table>
Shinsei Bank - increasing operational efficiency with FLEXCUBE®

Abstract
Shinsei Bank was running a set of disparate systems that were not communicating with each other. This lack of integration between systems precluded real-time data analysis, hampering the update process and the generation of P&L statements.

Customer profile
Shinsei, meaning rebirth, was the name chosen for the reincarnation of Long-Term Credit Bank of Japan Ltd.

The bank’s challenges - old and inflexible systems
Shinsei Bank was running a combination of IBM mainframes, IBM-compatible mainframe systems and AS/400 systems that were over 15 years old. Applications were written in assembly languages, without any database technologies. The bank’s networks for data exchange and accounting were disparate and could not communicate with each other. The bank faced the following challenges:

- Old and inflexible IT systems, with more than 40 disparate systems from different eras
- Lack of real-time analysis
- Upgrades were difficult to implement, functionally and capacity-wise
- The general ledger system was unable to generate multiple P&L statements for individual lines of business
- Different types of accounts were managed by multiple mainframe systems, therefore, a single customer view was not possible

Shinsei Bank’s requirements
The bank needed a solution that would meet the following objectives:

- Launch a retail banking functionality
- Achieve 120 to 160-basis-point return on assets (comparable to Western banks and far ahead of the 30-basis-point return typical of Japanese banks)
- Hedge financial risk by managing financial flows
Manage operational risk associated with high transaction volumes and provide robust operational and technological infrastructure to support volume growth
• Effectively comply with all regulatory requirements
• Launch self-service channels and provide consistent customer experience, 24x7

**FLEXCUBE, offering a flexible and parameterized solution**
Shinsei Bank chose FLEXCUBE®, i-flex’s core banking solution, as it offered the bank the following benefits:

• Comprehensive functionality offering a broad set of end-to-end features to include current and saving accounts, term deposits, loans, investor services, among others
• Open systems architecture that is technology-independent
• Multi-channel banking for enhanced customer service through branches and remote channels, with the capability of “plugging in” innovative delivery channels such as ATMs, Point-of-Sale (POS) terminals, telephone/call centers, mobile, PDA and the Internet
• The bank selected FLEXCUBE, i-flex’s core banking solution, and FLEXCUBE Investor services for mutual funds and transfer agencies
• FLEXCUBE®: The Internet banking component of FLEXCUBE

**Customer benefits**
FLEXCUBE not only helped Shinsei Bank reduce the risks involved in its migration, but also enabled the bank to keep costs down. Further, it helped the bank with:

• Reduced operating costs, with 40 percent savings on application maintenance costs
• Entry into new markets such as wealth management, at one-third the time and at one-tenth the cost of a comparable mainframe deployment
• Introduce new products such as multi-purpose bank accounts called “Power Flex”, global mutual funds and foreign currency deposits
• Introduce new features such as re-packaging mortgages and other loans into marketable securities, joint bank accounts, higher interest rates, lower transaction fees, among others
• Introduce new channels of communication like Internet banking, mobile and telephone banking, and call centers offering 24x7 access
• Faster transactions, with ATM transactions 40 times faster than other Japanese banks. Customers from other banks can also use the ATMs, which increases the return on investment through sharing of operational costs
• Ability to provide real-time transaction information across all channels. Shinsei Bank is the only bank in Japan that offers this service
• Usability benefits resulting from an application with multi-byte support

**Core banking operations**
After the FLEXCUBE implementation, Shinsei Bank became one of Japan’s leading banks.

“We are able to renovate the system at one-tenth of the cost and one-third of the development time of those at other banks. As a result of introducing this system, ‘monthly calculation of earnings’ by products/customers is possible.”

Masamoto Yashiro, Chairman and President, Shinsei Bank
### Operational statistics of the bank

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of branches on FLEXCUBE</td>
<td>31</td>
</tr>
<tr>
<td>Number of ATMs</td>
<td>Around 65000</td>
</tr>
<tr>
<td>Number of customers</td>
<td>More than 2 million</td>
</tr>
<tr>
<td>Number of accounts</td>
<td>More than 5.6 million</td>
</tr>
<tr>
<td>CASA accounts</td>
<td>Around 2.5 million</td>
</tr>
<tr>
<td>TD accounts</td>
<td>Around 2.6 million</td>
</tr>
<tr>
<td>Loans</td>
<td>Around 0.36 million</td>
</tr>
<tr>
<td>Debt accounts</td>
<td>Around 0.83 million</td>
</tr>
<tr>
<td>MF accounts</td>
<td>Around 0.33 million</td>
</tr>
<tr>
<td>Average number of daily transactions</td>
<td>415670</td>
</tr>
<tr>
<td>Business products defined</td>
<td>CASA–28, TD–89, LN-26, FCIS-86</td>
</tr>
<tr>
<td>Number of enhancements till date</td>
<td>More than 1,500 (assumption atleast 1 per day since start)</td>
</tr>
<tr>
<td>Number of interfaces delivered till date</td>
<td>188</td>
</tr>
<tr>
<td>Average number of online transactions per day (peak days)</td>
<td>334894</td>
</tr>
<tr>
<td>Clearing (Outward)</td>
<td>85591</td>
</tr>
<tr>
<td>Clearing (Inward)</td>
<td>56700</td>
</tr>
<tr>
<td>Channels</td>
<td>ATM – 135110</td>
</tr>
<tr>
<td></td>
<td>J–DEBIT – 616</td>
</tr>
<tr>
<td></td>
<td>IVR - 2883</td>
</tr>
<tr>
<td></td>
<td>PowerDirect - 52994</td>
</tr>
<tr>
<td>Number of concurrent users</td>
<td>2,000</td>
</tr>
<tr>
<td>Maximum load of online transactions during peak hours (Generally between 10 AM to 2 PM)</td>
<td>ATM - 34749</td>
</tr>
<tr>
<td></td>
<td>J–DEBIT - 101</td>
</tr>
<tr>
<td></td>
<td>IVR - 704</td>
</tr>
<tr>
<td></td>
<td>PowerDirect - 9,719</td>
</tr>
<tr>
<td>Number of transactions during EOM</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Batch Timing Analysis – FCR (Excluding Backups)</td>
<td></td>
</tr>
<tr>
<td>Average daily EOD time</td>
<td>91 minutes</td>
</tr>
<tr>
<td>Average daily BOD time</td>
<td>23 minutes</td>
</tr>
<tr>
<td>Average daily EOM time</td>
<td>Beginning of Day - 26</td>
</tr>
<tr>
<td></td>
<td>Cutoff - 41</td>
</tr>
<tr>
<td></td>
<td>End of Day - 295</td>
</tr>
<tr>
<td>GL Handoff</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td>831339</td>
</tr>
<tr>
<td></td>
<td>Month end</td>
</tr>
<tr>
<td></td>
<td>6000000</td>
</tr>
</tbody>
</table>
i-flex® solutions, with its deep domain expertise in the BFSI space, has developed a process repository for banks. This repository draws extensively from i-flex’s vast experience in helping banks cut costs, respond rapidly to market needs, enhance customer service levels and mitigate risk.

The i-flex Process Repository for Banks (iPFB) liberates processes from the limitations imposed by technology; helps banks transform processes to service customers better, and to universally standardize and leverage best practices. iPFB includes proven and tested models validated through the global implementation of the FLEXCUBE® product suite in banks. These models can be fine-tuned to meet the specific requirements of your bank.

iPFB processes are organized by various lines of businesses such as trade finance, retail lending, treasury, cash management, and investment banking and also by functional areas such as customer service, risk and control, execution and marketing, and management.

i-flex, for iPFB, has leveraged the industry’s latest and cutting-edge technologies like BPEL, SOA and Oracle fusion middleware platform through strategic partnerships with proven industry leaders like Oracle and IBM.

iPFB provides a way for large financial institutions to jump-start their business process management (BPM) initiative using a battery of well-proven processes to knit together diverse applications without any manual intervention.

The iPFB advantage

iPFB provides a disciplined, de-risked and step-by-step approach for banks to:

- Identify individual business and underlying process and sub-process
areas to move from being application-centric to become process-centric.

- Monitor and measure process performance, process deficiencies, market requirements, and improvements in the existing processes.
- View transactions from origination to termination.
- Become agile in the process of launching newer customer products, and respond faster to changing market conditions.
- Define and standardize internal and customer facing processes and ensure compliance of such defined processes by users.
- Become agile, efficient and transparent.

FLEXCUBE, together with iPFB, will help your bank improve process efficiency and optimize processes using a Business Process Management (BPM) approach. Banks can also use iPFB to integrate diverse applications into a common operating environment. iPFB monitors risk indicators and serves as a vital link in the implementation of a Risk Control Self Assessment framework.
Financial institutions today are under pressure to control costs, improve efficiency, and leverage customer intimacy. They are challenged by consolidation (M&A), international expansion, regulatory pressure, rising customer expectations and reduced customer loyalty. They have sought to meet these challenges by reducing costs, improving operational efficiency, gaining customer insights, adhering to compliance norms, and by managing risks in a proactive manner.

Banks incur large expenses in maintaining multiple stand-alone applications, which operate on different frameworks and programming languages, span the length and breadth of the enterprise and seldom seamlessly ‘talk’ to one another. This leads to the rise of unnecessary complexities in product definition, bundling, relationship management, regulatory compliance, customer service and timely product development.

The answer to these challenges is to move towards a process-centric approach, driven by Service Oriented Architecture (SOA), instead of an application-centric architecture.

**FLEXCUBE® functionality through Web services:**

With i-flex’s exclusive focus on the financial services domain, we offer IT solutions that help customers cut costs, respond rapidly to market needs, enhance customer service levels and reduce risk. To give a competitive advantage to financial institutions, i-flex® solutions launched FLEXCUBE® web services. FLEXCUBE, i-flex’s core banking solution, already has 1000+ Web services published that are available for process instantiation.

The banking functions in the FLEXCUBE Web services suite will help banks:

- Reduce integration timeframes
- Improve performance
- Enable reusability
- Reduce cost of maintenance
• Enforce standards of integration between various systems at an enterprise level

Financial institutions can orchestrate their business processes using industry standard tools for Business Process Management (BPM), and Business Activity Management (BAM), and allow external applications to interface or co-exist with FLEXCUBE. FLEXCUBE Web services will liberate your bank from a rigid, pre-defined application architecture environment, and propel them into a process-driven, open environment.

Banks will gain the flexibility to quickly configure new processes as per market demands, without having to re-write the application code. They would be able to design new products or services through Web services for specific banking tasks like transaction initiation and processing, charge and fee calculations, and accounting, while embedding services from other applications in the process.

These Web services have been designed taking into account industry standards such as Component-based Development (CBD), Model-Driven Architecture (MDA) tooling, Web Services Description Language (WSDL), and Business Process Execution Language (BPEL). They can be published to enterprise middleware or be invoked directly by other applications. FLEXCUBE Web services also allows very high levels of interoperability and portability by making information and business processes available to other products that your bank may have or will acquire.

Ensuring profitability:
Through the web services model, financial institutions can leverage FLEXCUBE to safeguard old investments and optimize existing ones. With this, application development costs, as well as maintenance costs can be considerably reduced. Financial institutions using FLEXCUBE Web services will be ready to face a fast-changing business environment and the underlying challenges more confidently, and be able to test, integrate and deploy products in a shorter timeframe.

For those moving to a SOA, FLEXCUBE Web services is a good starting point as it future-proofs a financial institution, while increasing its business agility, resilience and efficiency of operations.