



1KEY Business Intelligence Customer Case Study



Overview

Country or region: India
Industry: BFSI

Export-Import Bank of India
Mumbai, INDIA
www.eximbankindia.com



Sunita Sindwani
Chief Technology Officer
EXIM Bank

I.T. Infrastructure

Enterprise Applications:

Database: Oracle, Excel

Data Warehouse: MS SQL

Comprehensive Business Intelligence Application Addresses Data Analysis & Reporting Needs of Export Import Bank of India

1KEY BI, information request catalyst at Export Import Bank of India

“BI solution is critical to the bank’s IT infrastructure, enabling its end users to analyze data to effectively take informed decisions with increased insights.”

- Sunita Sindwani, CTO, Export Import Bank of India

EXIM is the premier export finance institution of the country, launched by Government of India with a mandate, not just to enhance exports, but to integrate the country’s foreign trade and investment with the overall economic growth. EXIM has been both a catalyst & a key player in the promotion of cross border trade and investment. Commencing operations as a purveyor of export credit, EXIM has, over the period, evolved into an institution that plays a major role in partnering Indian industries, particularly the SME, in their globalisation efforts, through a wide range of products and services offered at all stages of the business cycle, starting from import of technology and export product development to export production, export marketing, pre-shipment and post-shipment and overseas investment.

“End users in all departments across the bank can now create sophisticated yet intuitive reports in various formats, and use them for continuous and sophisticated analyses of extensive financial data by enabling its end users to create, modify and deploy reports.”

Deepak Bhatia, Manager - IT

Export Import Bank of India

Challenge

Exim Bank finances, facilitates and promotes India's international trade and investment, and coordinates working of institutions engaged in financing exports and imports. Bank has well-structured business processes. It is officer-oriented and adopts a multidisciplinary approach involving close coordination amongst specialists drawn from several fields such as Bankers, Business School Graduates, Economists, Chartered Accountants, Engineers, Law, Human Resources and Information Technology. Decision making process is consultative across Groups / Levels. Emphasis was on creating and enhancing international competitiveness.

Bank's organizational structure is designed to reduce procedural rigidity while stressing interdependence and coordination among various Groups through ease of information flow, and to create an enabling environment so as to facilitate innovation as a part of continuous review of technology and its applications to the Bank, we proposed to implement Business Intelligence Solution in the Bank.

Selection of BI

EXIM Bank with an intention to procure a BI solution released a procurement document under a tendering process and invited sealed applications from firms for Prequalification to undertake supply and implementation of a BI Solution. The shortlisted prequalified vendors were than invited to submit detailed proposal. The shortlisting was done based on vendor and product evaluation which included:

- Extent of customization required
- Security Features
- Technology fit
- Performance
- Number of installations

- Existing customer reference
- Cost
- Vendor standing, rating of an approved agency, if any
- Flexibility
- Scalability
- Capability of migration to another platform / solution
- Hardware / Software requirement

Technological aspects required in BI solution

- Multi-tier architecture with each tier fully independent – An N-Tier architecture with Thin Client leads to the entire Administration being managed by the experts. Also with this architecture, the tasks are layered wherein different Application and Business Logic can be defined.
- Web Desktop for Browser based access (Preferably Thin Client Architecture) – This helps as the end-user need not be aware of the happenings in the Server side of the product. Every Client will need only the Internet Browser to access the Server.
- Web based administration of the BI software - This leads to monitoring the BI software from any location where Internet Browser is present.
- HTTPS/SSL Support – Secure Client Access to the software.
- Support for Multiple platforms, Database, Web servers is a feature of BI for compatibility with various available architectures and solutions.
- Support for J2EE and XML based Application Server – For future integration with ERP and other Applications of an Organization.
- Support for multiple Web Servers, Application Servers and database servers for Fault Tolerance & Load Balancing.

“BI offers superior data and end user scalability as well as powerful analytical capabilities. With BI software, our end users can create a wide variety of analytical reports that serve as a good reference in the decision-making process. As a result, we will be able to enhance our work efficiency and utilization of the bank’s financial resources.”

Sunita Sindwani, CTO

Export Import Bank of India

Security Features of BI

The BI Solution needed to have an extensive range of Security Controls in-built as per IT regulatory & legal framework. The features of BI Solution, which enable this, include:

- Definition of Users and Groups relation in the system
- Grant users and groups access permissions on various reports
- Multiple levels of access rights (Delete/Edit/View/None)
- Support for system privileges
- Secure login and passwords for each user
- Support for Password encryption
- Authorization through Directory Services
- The data should be kept in protective mode
- Field based filtering / access
- Disaster recovery by replicating the data at remote locations

Administrative Features of BI

User friendly browser based management functionality facilitates various controls

- Easy to deploy and administer.
Administrator would need to have minimum amount of training to understand the management of the BI Solution
- Definition of Users and Groups for the system through a GUI interface
- Option of granting rights to Access, Modify or Delete documents and folders
- Notifications & Reminders helps in identifying the status to the Administrator. This can be through Email, SMS, popup window, etc.
- Ease and user-friendliness of taking complete and incremental backups

Networking Features of BI

- Local Area Networks – BI Solution should be accessible on Intranet.

- Wide Area Network using various communication channels. BI Solution should be accessed across remote locations in different locations in different Geographical area.

Generic BI Software Features

The software solution mated to the Business Intelligent (BI) solution should exhibit the following key features:

- User-friendly, context-sensitive, self-contained.
- Capability of multiple user, simultaneous access
- Capability of remote access from the Bank’s offices across the country.
- Capability of recording recommendations at each stage of processing, differential access rights, security provisions.
- Capability to define work flow in accordance with various user levels / hierarchies
- Interface with bank’s e-mail system setup and ability to generate electronic alerts to the next level user on completion of the process at previous level
- Detailed audit trail with regards to any changes in database/access across various user levels

Functional areas targeted

Broad objectives of implementing BI was historical analysis, performance budgeting, business performance analytics, employee performance measurement, executive dashboards, marketing and sales automation, product innovation, Product Pricing, Tool for internal inspection, customer profitability, regulatory compliance and risk management.

“If planned well, and if your expectations and deliverables are defined well in advance, BI project is easy to handle. The clarification of requirements and matching the expectations of different user groups is slightly complex, however regular communication and involvement of the user groups makes the process an enjoyable journey, which we are experiencing at EXIM Bank.”

Sunita Sindwani, CTO
EXIM Bank

Methodology

Methodology of BI Implementation was built from the ground up to address the unique demands of BI full lifecycle development. We had taken an iterative approach to development that readily adapts to projects of varying size, scope and platforms. We regularly refreshed this methodology by updating it with project management and BI best practices gleaned from ongoing efforts with the entire project team. It contained a well-defined framework and rich content that guides projects step-by-step along business, data, technical and metadata paths of development. Using this mature and proven methodology reduced risk, minimized surprises, and maximized business value by consistently delivering high quality results.

We created a thorough, well-documented and organized set of procedures that moved the project teams successfully through an entire system development lifecycle. 1KEY methodology for BI Implementation met a wide variety of needs by incorporating the most desired BI characteristics.

Nelito Systems implemented 1KEY BI within a span of 6 months. Project team included 2 consultants from Nelito and 1 functional & 1 technical expert from Exim.

Benefits

The users are satisfied. The bank has large team of executives and a line of senior managers, and their expectations for analysis always needs a deeper dive in the data-set and report design. We are glad that the users were able to get a better experience of the same, and are able to analyze the data as per their expectations. User have happily provided the sign-off and are able to save a lot of

time on reporting tasks, and able to invest more time and energies on analysis, which is their core strength.

Top Management

TOP management is provided with dashboards and report access. The usage by them and their secretaries is highly appreciative to help them enhance the quality of decision with the help of facts and figures easily accessible to them.

Operational Users

EXIM bank has gone for Enterprise Edition of 1KEY Agile Business Intelligence Suite, enabling it to extend the usage across the length and breadth of the organisation. In phase one of the deployment, bank has been able to extend the usage to diverse user groups and is planning to extend the same to other users groups too.

Around 50 users across IT, MIS teams, Group Heads, Front-Desk Officers, CFG, Investment, Loan, Advances team are using & getting the benefits of this BI tool.

Return On Investment

1KEY BI was too cost effective, and hence has turned to form a great value proposition for EXIM. We achieved ROI in the very first year of implementation of BI.

Support & Service

The support by the Vendor – MAIA Intelligence, has been excellent. They are always available to extend the support as and when required during our transformation of other IT infrastructure too. This has helped us to move with better confidence, and enabling negligible downtime for the application. The team of Nelito Systems, was very cooperative and talented. They were able to interact with business users and build a better comfort with them, helping the bank to have the

“This is the first time experience in Handling BI projects, team has handled project for MIS and reporting solution. This was a better experience compared to others. EXIM team was able to develop and extract reports faster and satisfy user requirements more systematically and dynamically. Other points may be added based on other Case-Study updates”

Sunita Sindwani, CTO
EXIM Bank

change management and transformation seem smooth and painless. Complete documentation of the BI solution was handed over to the bank. The consultant also organised training for the Bank staff at various levels.

USP of this BI Project

The ability to access detailed levels of information in real-time and act on that information is crucial in the increasingly competitive banking environment. No longer can a bank put all activities on hold while overnight processing takes place. Similarly, regional banks cannot afford to need to stand still while spending a significant amount of time trying to find the right information on customers and the bank's business before making decisions.

Today, senior management at EXIM, including CEOs, receive and need to work from consolidated information that is first extracted from different applications and data sources. This posed two main challenges: the guarantee for consistency of data; and the time taken to consolidate that data for being up to date.

BI was the answer is to bring all the customer and enterprise-wide business data together. This data consolidation needs to be done across all operations. One challenge was to include in this rationalisation exercise all data from disparate systems that are often incompatible. We could achieve this with the 1KEY BI technology.

Senior managers now have all the information available from different systems to use this for activities such as revenue and cost analysis or trend analysis. But more importantly, any other process within the bank can access and

act on this information. Decision makers can now run sales activities and marketing campaigns based on timely, accurate information.

And processes have become more accurate and efficient as centralized customer-centric information boosts straight-through processing.

Business users need answers to questions such as 'Which products generate the most value, and through what channels?', 'What makes them profitable?', 'What is the best way to sell products?' and 'Which sales force is most effective?'. This is the kind of valuable information upon which banks can make accurate, successful strategic decisions.

There are even more complex questions that are asked and the answers can provide important insight to senior management. These include: 'What would happen to profitability and customer satisfaction if the bank stopped selling a particular product in branches?' and 'What is the optimal product mix & Product Price to offer through which channel?'

BI can now answer these questions and has become a strategic tool used frequently by top management. A wide range of information about our business and our customers is monitored in real time. Weekly or day-end reporting is longer enough.

And in order to achieve this, and with a goal to ensure data consistency with one logical source of data that meets both analytical and operational requirements to produce a single version of truth, BI was implemented. Senior bank management now realizes that the value of information comes not from having it, but from using it. With 1KEY BI, EXIM bank shall be more

“Business Intelligence is the need of the hour, there is a lot of expectations from the usage of the technology. The BI projects are not just IT projects, there should be a good quantum of User involvement at all stages of the project, to enable better value from the project.”

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EXIM Bank

competitive, more profitable, and therefore, more successful in the long term.

EXIM bank has sought a comprehensive focus across retail liabilities, corporate assets, operational risk, and asset-liability management, with the end-game of providing financial, risk, operational, and customer intelligence to the right users, in the right place, at the right time, and in the relevant format, delivered in a secure, automated environment.

An organization faces multiple business challenges with respect to obtaining BI coupled with information security risk. We believe that with the implementation of the Business Intelligence tool – 1KEY, the solution is more agile, flexible and consistent.

The tool is architected to seamlessly integrate multiple applications across varied business segments and provide an integrated data platform on which multiple variations can be made accessible on a centralized level. This has benefited the bank in the integration of information, ease of reporting, holistic customer view, effective resource utilization, end-user simplification, providing business opportunities and superior customer service.

Roadmap

Exim Bank is in the process of deploying Core Banking solution, and hence it is planning to extend the use of 1KEY BI to all the branches and users groups on similar data-sets too.

Challenges while implementing BI solution

There is always change management challenge in such deployments, which

needs to be handled with appropriate care and attention.

It was tough to get the top management engage on the subject of BI. We came up with an idea of doing a proof of concept. We generated reports with 1KEY BI that helped understand the data in terms of loans & advances, repayments, NPA/PA, credit, bills purchased, overdue, repayments, investments, expenses, outstanding, PLR, regulatory compliance, reviews & renewals, schemes and so on. It won the approval of the top management.

User Acceptance

With the increase of governmental regulations, information is the key component to compliance for a banking & financial organization like EXIM. 1KEY BI together with the banking expertise of Nelito Systems could focus on the informational needs of the user community at EXIM. 1KEY BI helps the decision makers at EXIM to make the best decisions or take the best actions based on the most accurate, complete and timely information. It has helped us to monitor Credit Exposure as per individual & group exposure.

It has helped us to monitor repayment schedule & improve the recovery process.

With 1KEY BI we are able to generate various regulatory compliances, which was very useful for RISK MANAGEMENT.

Senior bank management now realizes that the value of information comes not from having it, but from using it.

How did BI help EXIM Bank

With 1KEY BI, end users in all departments across the bank can now create sophisticated yet intuitive reports in

“EXIM Bank needed a single BI environment that was powerful enough to support hundreds of users, yet flexible enough to meet the varied reporting needs of different departments. With 1KEY BI, the bank was able to create a secure and pervasive reporting system that is fully integrated into core activities and business processes across the entire organization, providing significant advantages to employees and customers alike.”

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EXIM Bank

various formats, which are available on web as well. 1KEY BI meets the bank's business intelligence standards for continuous and sophisticated analyses of extensive financial data by enabling our end users to create, modify and deploy reports with ease via the Web.

Today's banking companies operate in an industry more diverse and unpredictable than any other. Through mergers, acquisitions, partnerships, and internal growth, financial institutions are racing to gain a competitive edge by entering new business areas and delivering more products and services. The banking industry is unique among other industries due to the amount of governmental regulation and oversight, yet at the same time banks must compete in the free market to gain customers, engage in marketing tactics and make a profit for its stockholders. It is also unique that most currency transactions do not occur from one person handing someone else cash money. Most currency transactions occur via electronic information exchange only without cash actually exchanging hands.

Essential Features / Capabilities of BI Solution

- Extract, clean, transform the data from various sources to a logical report format for various time frame (year, quarter, month, week and day wise)
- Queries output and reports in various format such as Dashboards, Key Performance Indicators (KPI), Score Boards Graphs and Charts etc.
- Generate statistical reports for various risks such as credit, market, interest rate etc. for the purpose of risk management
- Generate various statistical reports as per regulatory requirement
- Generate reports on real time, on demand basis

- Use operational transaction data
- Runs on existing databases and provide information at convenience without the need for re-entry of data
- High availability
- Collate voluminous data generated by transaction and analyse, interpret the data for both strategic and operational purpose
- Export the report to various formats
- Role based reporting facility
- Hierarchy based reporting facility
- Allow reports to be easily sent with any MAPI (Mail Application Program Interface)-compliant e-mail system and read by recipients who do not have BI system
- Storage of reports in an unalterable format, such as CD, DVD or WORM
- Reasonable controls to ensure integrity, accuracy and reliability
- Ability to print copies of reports
- Cross-reference with other systems and software of the Bank
- Documentation on how the software works and how it has been set up
- Facility of zoom-in and zoom-out, zoom percentage and Zoom lens to zoom in on the reports
- Provide the Editing and Modification functionality. Depending on the privilege rights, user(s) should be able to edit and modify the details of the concerned report. Strict security procedures, validation checks and proper record of addition / modifications must be ensured
- Alerts & Reminders

Partial List of Reports

- Integrated Credit Exposure Individual and group exposure across the EXIM
- Sanction details across various dimensions
- Disbursement details across various dimensions (rep. office wise, group wise, industry wise, country wise, currency wise etc.)
- Repayment details across various dimensions
- Outstanding details across various dimensions
- Overdue details across various dimensions
- NPA analysis similar to that listed above. Also analysis such as
 - Detail of Top n NPAs/PAs
 - List of top n NP Investments
 - List of other assets (cut of value and above)
 - List of top n loans and advances
 - List of Full NPA list / PA List
 - Total credit exposure
 - List of new credit sanction/ disbursed / client / product under each scheme for a time frame. (No. of A/C s & Sanctioned amounts)
 - Age wise position of proposals overdue for review/ renewal
 - Details of bills purchased / discounted/ rediscounted during the year
 - Portfolio wise return
 - PLR monitoring reports
 - Issuer categories in respect of investments
 - As on from date
 - During the period
 - Renewals
 - Balance overdue as on to date
 - Regulatory reports:
 - Statement of Liabilities & Assets of the FI as on March 31
 - Statement showing the profile of Investment as on March 31
 - Earning Appraisal - Position as
 - Statement showing the profile of Non-performing advances as on March 31
 - List of 100 top Standard Accounts in descending order as on date of inspection
 - Size and composition of loan assets
 - Production Credit - Disbursement & Refinance
 - Investment Credit - Disbursement & Refinance
- Loan-wise /segment wise income or profitability analysis
- Data set for administrative expenses enabling drilling down on dimensions such as group, type of expense, dates, amount, beneficiaries etc.
- RSS feeds for news updates

For More Information

For more information about MAIA Intelligence products and solutions, call Sales Information Center at: (+91) 022 668 88 999 or e-mail us at: sales@maia-intelligence.com. To access information using the Website: www.maia-intelligence.com

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