

7 Information Technology Developments

7.1 Overview

As always, during FY10 also, Information Technology was instrumental in transforming SBP into a vibrant organization by introducing best practices, reducing manual work, providing information timely online, and centralizing data repository to enhance decision-making ability through advanced analytics. The information management technology advancement pioneered by SBP has been a trend-setter for domestic financial market and government institutions. Rapid and extensive infrastructural improvements made in the banking industry have resulted in improved services for the end consumer. SBP coordinates with governmental and financial institutions such as FBR, PIFRA, and provincial governments and banks in setting up data exchange facilities and inter organizational processes to facilitate and improve efficiency of financial activity in the country. ISTD is facilitating the PRI initiative and the FMU in setting up their IT systems.

7.2 Globus Banking and Currency Solutions

FY10 was the fifth successive annual closing through the Globus Banking application at SBP and BSC. This shows the reliance of SBP business processes on IT systems and reflects the trust of business users on automated systems. During the year, a successful testing of Globus DR was carried out involving all users of SBP and SBP BSC offices covering transactions of one full business day. Roll out of the Currency Issue System in 16 BSC offices after incorporation of Rs10 denomination commemorative coin issued on the occasion of 60th Anniversary of Peoples' Republic of China was also achieved during the year. It was the fifth successful enhancement since its roll out in 2005.

New functionalities were also added to Globus system including Reverse Repo module for Finance Department, enhancement of interface for all SBP BSC offices with ERP Accounts Payable module for direct payments to vendors through their accounts maintained in commercial banks, and MIS for loans received from various Donor Agencies. These functionalities have resulted in a reliable and accurate MIS through Globus. Various new reports and customizations were done during FY10 to keep enhancing the utility of Globus System for users of the system throughout the country. The procedures for disposal of discontinued Rs5 currency notes and capturing Fresh Notes were also revised and rolled out at all BSC offices. The procedures for receipts of remittances in examined balances and issuance of Rs5 and 10 Fresh Notes quota by the Chief Mangers were also developed and rolled out at 16 BSC field offices.

7.3 Oracle ERP

ERP team had several technological challenges during the year. Implementation of direct payments to vendors' bank account in 16 BSC offices was one of them. And thus payments to vendors, employees, and other stakeholders were totally automated by transferring payments through bank account in lieu of payments through cheques. In the new system, physical payment documents are replaced by the electronic records transferred directly to GLOBUS system from Oracle Accounts Payable. To implement the "Automated Rounding" solution, the standard functionality of Oracle AP has been customized. All the payments will now automatically be rounded including 'Vendor Payments', 'Normal WHT Payments' and 'Withholding on GST Payments'. Responding to the user demand, Medical Services System (MSS) has been enhanced in all BSC Offices.

ISTD has developed an Unclaimed Deposits Accounting and Information System for BPRD that completely automates the management of unclaimed deposits surrendered by the banks. To provide an insight into the foreign exchange accounts, a comprehensive Foreign Exchange Accounts information system was also developed and implemented.

ISTD is implementing a revolutionized SBP library management system. This system is more secure, more user friendly, more productive, and highly maintainable and scalable with future in mind. A complete Content Management System has been developed so that library staff could post/edit content themselves without involvement of IT personnel, to achieve the true sense of automation.

ISTD, as usual, kept serving the external stakeholders this year, too. As per FBR's requirements, ISTD automated the process of Filing by converting it into complete e-Filing. In addition, WHT Exemption Certificate functionality was implemented to meet the specialized requirements of FBR.

7.4 Data Warehouse

ISTD-Data Warehouse Division has successfully completed several high impact automation projects for SBP. It also implemented new technology of Oracle Discoverer & Warehouse Builder for SBP Data warehousing/Business intelligence.

Human Resource Data analysis system for HR Department. This system helps analyzing subject-specific required information for better decision-making – covering mainly employees' salaries and other benefits, transfers, postings, appointments and strength across department and grades, etc.

Write-off Loan Data analysis system for BPRD. This system covers all banks' Outstanding Liabilities (principal, interest/markup and others) and subsequent write-offs (Principal, Interest/Markup and others) during the last three decades.

Agricultural Credits Data Analysis System. This mainly covers agriculture credits, disbursement, disbursement targets by bank and by province, recoveries, outstanding numbers of borrowers, and defaults cases, etc.

Oracle Discoverer System. This system provides SBP users more control on fulfilling their information needs with little or no assistance from technical side, whereas the implementation of Oracle Warehouse Builder will enable ISTD to standardize and streamline all important activities of designing and populating the Data Warehouse from various data sources.

Data Acquisition and Data Warehouse Portal system aims to standardize SBP's entire file based data acquisition processes from all the stakeholders (internal and external) across all the business areas. After a successful internal launch in Jan 2010, this system has also been made available to banks from July 1, 2010. Initially banks are submitting monthly return of International Transaction Reporting System (ITRS); however with the passage of time it is expected that all the regulatory returns (approx 100+) would be submitted through this portal.

7.5 Infrastructure

This year, state of the art Network Operations Center (NOC) of SBP has started functioning. This NOC provides highly proactive management and monitoring capabilities for Information Assets of SBP assuring minimum downtime and outage of services. The project is in final fine-tuning stage and its purpose-built civil setup work is being completed.

Corporate Servers that run the Core Business Applications have been upgraded this year.

The DR site is functional and is going through a series of tests for the Gold, Silver and Bronze tier applications to ensure the robustness of DR response. The DR Data Centre is in implementation phase and is expected to become functional by April 2011.

On the data communication side, SBP's VSAT connectivity has been upgraded to iDirect Technology and increased bandwidth to meet current demand and projections for the next two years.

Connectivity between Main Data Center and the Disaster Recovery Site was enhanced and backup connectivity links were commissioned to achieve highest level of availability. Similarly Internet and intranet bandwidths were enhanced to provide required level of service to the stakeholders of the Bank.

As a part of planned developmental projects, other infrastructure teams of ISTD enhanced, replaced and installed various components that enhanced the functionality and performance of the overall IT architecture.

7.6 Information Security

A major achievement in data communication area has been the encryption of WAN links that ensured confidentiality of SBP data in transit. To implement encryption, ISTD replaced WAN devices so as to support the latest encryption technology. Moreover, analysis and design of network connectivity for BCP site was also initiated which will be completed in the next fiscal year.

ISTD has developed a high level IT Security Framework for SBP which will serve as a standard for information security management that was approved by SBP management. As part of data security strategy, to protect the business data on SBP laptops, a data encryption solution was implemented. SBP IT Security Review program was developed and approved. This comprehensive program implementation will enhance the overall security of IT assets of SBP and its subsidiaries.

In the information security policies area, Globus user policy has been reviewed and updated to address the issues emerging from new business requirements. Moreover, policy directives were issued pertaining to unlicensed software and prohibition of using personal internet connections.