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JOURNAL AND OTHER ARTICLES

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INFORMATION TECHNOLOGY: ITS APPLICATION AND IMPACT ON ORGANIZATIONAL CULTURE OF STATE BANK OF INDIA AND ITS ASSOCIATES WITH SPECIAL REFERENCE TO MODERNIZATION OF CORE PROCESSING SYSTEM

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ABSTRACT

The implementation of the Tata Consultancy Services(TCS) BaNCS Core Banking at the State bank of India (SBI) and its affiliate banks shows the biggest centralized core system implementation ever under taken . The overall effort incorporated the conversion of nearly 140 million accounts held at 14,600 domestic branches of SBI and its affiliate banks. This research paper studies regarding Information Technology, its Application as well as its impact on Organizational Culture of State Bank of India and its five Associates with special reference to Modernization of Core Processing System, the critical success aspects, and the conversion methodology implemented.

KEYWORDS

Information Technology, Organization Culture, Core Processing System.

INTRODUCTION

Information and communication technology (ICT) has considerably transformed the banking, financial services and insurance (BFSI) sector. According to Vij (2006), "I.T. has introduced new business paradigms and is increasingly playing an important role in improving the services in the banking industry." The foundation for introduction of computer technology in the Indian banking sector was laid by Dr. Rangrajan Committee's two report in the years 1984 and 1990s, banks started thinking on the subject of tying-up different branches together to facilitate information sharing . Entrance of private banks and foreign banks in banking dome with completely different strategies and vast IT budgets gave big boost to e-banking in India. An array of banking services offered to retail as well as wholesale customers via an electronic distribution channel is collectively referred to as e-banking. Naresh Wadhwa, vice president of west Cisco system (India) confirms that, "with the improved services and lowered costs of service providers such as DoT and VSNL, it became more practicable for banks to network their branches. This gave banks a momentum to network all the branches and establish a centralized database. With these developments it became plausible for operations such as Management Information System (MIS) to be truly automated and centralized." After the turn of consolidated data bases as well as networks come core banking applications. Core banking applications help offer complete front as well as backend automation of banks.

BACKGROUND

The State Bank of India is the oldest as well as the largest bank in India, with more than \$250 billion (USD) in assets. It is the world's second-largest bank in terms of number of branches; in recent times its 10,000th branch was opened in India in 2008. The bank has established 84 international branches that are located in 32 countries and nearly 8,500 ATMs. Furthermore, SBI has been controlling or complete interest in a number of affiliate banks, which has resulted in the availability of banking services at more than 14,600 branches and nearly 10,000 ATMs.

SBI traces its ancestry to British India, to the formation in 1806 of the Bank of Calcutta. In 1809, the bank was renamed as the Bank of Bengal and operated as one of the three premier "presidency" banks (the presidency banks had the exclusive rights to supervise and circulate currency and were provided with capital to establish branch networks). In 1921, three presidency banks were consolidated into the Imperial Bank of India by the government. The Imperial Bank of India continued until 1955, when it was renamed as the State Bank of India.

In 1959, The State Bank of India Act was passed by the Indian government, resulting in the attainment (majority shareholding) of eight state-affiliated banks as well as the creation of the State Bank of India Group (SBI Group). The SBI itself is now major share owned by the Indian government, which bought the shares held by the Reserve Bank of India.

PROFILE OF THE STATE BANK OF INDIA AND ASSOCIATE BANKS (MAY 2008)

Sr. no.	Bank Name	Headquarters(City, State)	Branches	ATM's
1	State Bnak of India	Mumbai , Maharashtra	10,000	8,500
2	State Bank of Bikaner and Jaipur	Jaipur , Rajasthan	833	336
3	State bank of Hyderabad	Hyderabad , Andhra Pradesh	965	450
4*	State bank of Indore	Indore, Madhya Pradesh	301	235
5	State Bank Of Mysore	Bangalore, Karnataka	654	247
6	State bank of Patiala	Patiala Punjab	766	353
7*	State Bank of Saurashtra	Bhavnagar, Gujarat	452	190
8	State Bank of Travancore	Trivandrum, Kerala	706	33`1

Source: Unpublished Records of State bank Of india (2008)

Note: State Bank of Saurashtra and State Bank of Indore have been consolidated into the State Bank of India

Unlike private-sector banks, SBI has a twofold role of earning a profit and expanding banking services to the masses throughout the India. As a result, the bank built a wide branch network in India that included many branches in low-income rural areas that were considered unprofitable to the bank. Nonetheless, the branches in these rural areas resulted in introduction of the banking services to tens of millions of Indians who otherwise would have lacked access to economic services. This custom of "banking inclusion" recently made India's Ex-Finance Minister P. Chidambaram to comment, "The State Bank of India is owned by the people of India." The implementation of computerization at Indian banks during the 1970s and 1980s was hindered by the lack of reliable communications and power (predominantly in rural areas). Throughout this period, all the account information was typically maintained at the local branches with either manual or semi-automated ledger card processing. During the 1990s, the country's low labor costs, intellectual capital, and improving telecommunications technology resulted in beginning of a period of rapid growth of Indian economy. They allowed India to offer its commercial services around the world. This growth was also aided by government decision to allow the creation of private sector banks. This growth in Indian economy was also aided by the government's decision to permit the establishment of private-sector banks (they had been nationalized in the 1960s). The private-sector banks, such as ICICI Bank and HDFC Bank,

changed the landscape of banking in India. They started implementing modern centralized core banking systems and electronic delivery channels that helped them to launch new products and provide greater ease to their customers. As a result of it, the private-sector banks fascinated more middle as well as upper-class customers at the price of the public-sector banks. Furthermore, foreign banks such as Standard Chartered Bank and Citigroup used their highly developed automation capabilities to expand market share in the business and high-net-worth markets.

LITERATURE REVIEW

RajShekhar (2004) states that E-Banking is a mix of services which includes internet banking, mobile banking, ATM, Fund transfer system, Real Time Gross System (RTGS), National electronic funds transfer (NEFT), Electronic Clearing Services (ECS), credit/debit/ smart cards cash management services, and data ware housing, operational data for Management Information System (MIS) and Customer Relationship Management (CRM). While e-banking offers a lot of advantages in terms of convenience, ubiquity, speed of transaction, efficiency (in terms of cost and time) and effectiveness (in terms of scope of activity), it also poses lots of challenges in form of registration hassles, navigation difficulties and security & trust.

Varma (2006) states that a bank which moves fast and tries to capture the first mover advantage can think of succeeding in this sector. Another key success factor will be the value, which the online operations of the banks will be offering to the consumer. Shaw (2004) asserts that internet affected the competitive landscape of the banking industry by many ways. Firstly it changed the industry structure and in doing so, altered the rules of competitions. Secondly, it created competitive advantages for banks giving them new way to outperform their rivals and finally the internet had spawned the creation of new business that were beyond the traditional banking domains.

INFORMATION TECHNOLOGY INITIATIVES IN STATE BANK OF INDIA AND MODERNIZATION OF CORE SYSTEM

SBI had undertaken a massive computerization effort in the 1990's to automate all of its branches, implementing a highly customized version of Kindler Banking Systems' Bankmaster core banking system. However, because of the bank's historic use of local processing and the lack of reliable telecommunication in some areas, it deployed a distributed system with operations located at each branch. Although the computerization improved the efficiency and accuracy of the branches, the local implementation restricted customers' use to their local branches and inhibited the introduction of new banking products and centralization of operations functions. The local implementation prevented the bank from easily gaining a single view of corporate accounts, and management lacked readily available information needed for decision making and strategic planning.

The benefits in products and efficiency of the private-sector banks became increasingly marked in the late 1990s as SBI (and India's other public-sector banks) lost on hand customers and could not catch the attention of the speedily growing middle market in India. In fact, this technology-savvy market section viewed the public-sector banks as technology laggards that could not stand up to their banking needs. As a result, the Indian government required to have the public-sector banks modernize their core banking systems. In response to the competitive risks and appeals from the government, SBI engaged KPMG Peat Marwick (KPMG) in 2000 to develop a technology policy and a modernization road map for the bank.

In 2002, bank management accepted the KPMG-suggested strategy for a new IT environment that included the execution of a new centralized core banking system. This effort would include the largest 3,300 branches of the bank that were situated in city as well as suburban areas.

The State Bank of India's goal for its project to modernize core systems included:

- The delivery of new product capabilities to all customers, including those in countryside areas
- The amalgamation of processes across the bank to realize operational effectiveness and better customer service
- Provision of a single client view for all accounts
- The ability to combine the affiliate banks with the SBI
- Support for all existing SBI products
- Diminish customer wait times in branches
- Reversal of the customer attrition tendency

CHALLENGES FOR THE BANK

The bank faced numerous unexpected challenges in implementing a centralized core processing system. These challenges included searching for a new core system that have capability process approximately 75 million accounts daily — a figure greater than any bank on the earth was processing on a centralized basis. Furthermore, the bank lacked required experience in implementing centralized systems, and its huge employee base took great pleasure in executing complex transactions on local in-branch systems. This practice made some people to doubt that the staff would efficiently use the new system. Another challenge was meeting SBI's unique product requirements that would need the bank to make widespread alterations to a new core banking system. The products comprise gold deposits (by weight), savings accounts with overdraft rights, and an astonishing number of passbook savings accounts.

VENDOR CONSORTIUM SELECTION

Recognizing the call for large centralized system expertise, SBI sought proposals from variety of vendor consortium that were headed by the leading system integrators. From these proposals, the bank lessened the potential solutions to vendor consortiums led by IBM and TCS. Thus, it was approved that TCS would be responsible for the necessary systems modifications and ongoing software preservation for SBI. Additionally, scalability tests were conducted at HP's lab in Germany to confirm that the system was capable of meeting the bank's scalability requirements. These tests proved the capability of TCS BaNCS to bear the processing requirements of 75 million accounts and 19 million every day transactions.

TATA CONSULTANCY SERVICES AND TCS BANCOS

Tata Consultancy Services, with its headquarters in Mumbai, India, is one of the world's largest companies in terms of technology with particular proficiency in systems integration and business process outsourcing. The company has more than 130,000 workers located in 42 countries and attained revenues of \$5.7 billion in fiscal 2008. Even though TCS has long been a leader in core systems integration services for banks, after it acquired FNS in 2005, the company also became a principal global provider of fundamental banking software for large banks.

INITIAL SBI CORE SYSTEMS MODERNIZATION PROJECT

The agreement for the initial project was finished in May 2002; 3,300 branches were to be converted by mid-2007. TCS without delay started a six-month gap analysis effort to determine the necessary software changes to the BaNCS system. The changes incorporated installing required interfaces with more than 50 other systems as well as making improvements to support the bank's product requirements. These product requirements were divided by customer segment to permit the vendor and bank to commence conversions before all the needed modifications were implemented. They placed a priority on the desirable changes that would permit branches with high-net-worth persons and then corporate accounts to be converted as early as possible.

INITIAL CONVERSION PROJECT

The conversion effort started in August 2003, when SBI transformed three pilot branches to the BaNCS system. The successful conversion and operation of these three pilot branches led to the conversion of 350 retail branches with high-net-worth customers between August 2003 and September 2004. At this point of time, the bank deliberately stopped the conversions to examine and resolve reported troubles. They examined, classified, and prioritized these problems by type

of resolution (e.g., software, procedural, training) and rigorousness. TCS managed software revisions for the significant software changes while the branch staff managed the required training and procedural changes.

After the implementation of software and procedural changes, SBI further converted 800 branches between December 2004 and March 2005. In contrast with the earlier conversions, this group of branches included primarily commercially driven offices. The conversion effort then again shifted its focus on retail branches until November 2005, when the bank halted again to resolve problems that came in front during this second group of conversions.

The system and processes were functioning efficiently, after the second round of changes, and management thought the branch conversion could be accelerated. An assembly line approach was then employed in April 2006 to speed the branch conversion process:

- (a) Branch employees were responsible for data polishing as well as cleaning of their customer information on the existing system.
- (b) Three months before their conversion date branches were notified to start "mock," or test, conversions using an exclusively formed test version of the BaNCS system.
- (c) Several test conversions were performed by branches in order to ensure that the actual conversion went easily.

By implementing the assembly line approach for branch conversions, SBI was successful in converting 1,200 branches in April and May 2006, completing the early 3,300-branch conversion two months ahead of the decided schedule. The landmarks for the initial core systems implementation project are integrated in the SBI and affiliate banks core systems modernization time line.

STATE BANK OF INDIA’S AFFILIATE BANK’S CONVERSION

As the rollout plans for State bank of India were being finalized, the bank make a decision to expand the scope of the core banking implementation to embrace its seven affiliated banks at that time. Currently SBI has just five associate banks because State Bank of Saurashtra as well as State Bank of Indore has been combined into the State Bank of India. TCS has build a separate processing environment in the Mumbai data center employed to support SBI. The conversion effort for each one of the affiliate banks took 18 to 24 months; the first six months were used for planning, training and creating the processing environment for the banks. The branch conversions overlapped amongst the banks facilitating all the affiliate banks to be converted within 30 months. The project was started in July 2003 for the State Bank of Patiala and in 2004 for the other affiliate banks. The whole affiliate bank branches were converted to the Bancs system by the end of 2005.

Success of scalability test led SBI to take decision of conversion of the approximately 6,700 remaining SBI branches to Bancs system. The conversion of the left over branches started in June 2006, with the declared goal of finishing the conversion by year end 2008. Employing the assembly line conversion approach established in the primary phase, the bank was successful in converting 1,400 of these branches by March 2007.

For the reason that the conversion methodology as well as Bancs System was thoroughly verified and stable, the assembly line conversion approach allowed the bank to finish the conversion before the schedule. Between April 2007 and March 2008 (the bank’s fiscal year end), SBI converted 4,600 of its branches to the new system. The left over branches were converted between April and July 2008.

CRITICAL SUCCESS FACTORS

Large –Scale core system implementations are typically the most costly and risky IT projects undertaken by banks. Failure of core system projects are not uncommon at large banks and result in both financial impact and lost business opportunities. Further, failed projects lead other banks to delay needed core systems replacements because they measure the risk of failure against the potential benefits of a new system.

Following factors contributed to the success of the SBI core implementation effort:

SENIOR MANAGEMENT COMMITMENT

The project was driven by the chairman of SBI, who met Information Technology (IT) as well as the business sector heads every month. Chairman keeps an eye on the overall status and ensured that adequate resources were allocated to the project and from time to time met the SBI Chairman to review the status of the projects.

STAFFING AND EMPOWERMENT OF PROJECT TEAM

The core banking team comprises of the bank’s managing director of IT acting as a team leader and 75 business and IT people chosen by the bank. TCS also staffed the project with roughly 300 IT professional trained on the Bancs system. Prominently, the SBI business people were viewed not just as contributors to main projects but as bank leaders. This squad reported to the SBI Chairman and was authorized with all decision making authority.

OWNERSHIP BY BUSINESS HEADS

The regional business heads were responsible for the successful conversion of their respective branches and descript the status to the Chairman. Thus the business heads’ aim was aligned with those of the project team.

FOCUS ON TRAINING

SBI employed its network of 58 training centers all over India to train employees on the new system. TCS employees first educated approximately 100 SBI professional trainers, who then further trained 100,000 SBI workforces at the centers; the remaining employees were trained at their respective job sites.

IMPACT OF NEW CORE SYSTEMS IMPLEMENTATION ON ORGANISATIONAL CULTURE OF STATE BANK OF INDIA AND ITS ASSOCIATES

The new core system has proved to be beneficial all over the bank for both the customers as well as the employees of SBI. For instance, the new core banking system has allowed the bank to redesign its processes. It set up 400 regional processing hubs for all metros and urban branches that have assumed functions earlier in the individual branches. The bank in recent times reported that business per employee has increased by 250% in the last five years.

The bank has accomplished its objective of offering its full variety of products and services to its rural branches. It delivers financial growth to the rural areas and offers financials inclusion for all the Indian civilians. Implementation of the TCS Bancs system has provided the bank with capability to combine the affiliate banks into SBI. In fact, consolidation of State bank of Saurashtra into SBI has been completed by the bank sometime back. The bank has reversed the trend of customer attrition and is now expanding new market share. Achievement of the core conversion project has also allowed the bank to carry out several new initiatives to further improve its service and support growth in future. These initiatives to offer better service in future and support future growth, these initiatives include the deployment of no less than 3,000 rural sales staff, redesign of over 2,200 branches in the last economical year, opening of ATM etc. to migrate customers to electronic delivery channels. The enhancement in productivity and expansion of business for the SBI Group is reflected as under:

SELECTED BUSINESS RESULTS FOR SBI GROUP (2002-07)

Category	(USD in Billion)						
	2002	2003	2004	2005	2006	2007	2002-07
Total deposits	\$72.0	\$82.5	\$99.6	\$115.7	\$121.9	\$146.4	103%
Total loans/advances	34.1	40.2	50.9	65.6	83.9	112.1	229%
Total operating expenses	2.00	2.25	2.87	3.30	3.95	4.60	130%
Staff expenses	1.29	1.56	1.82	1.97	2.41	2.44	89%
Total operating profits	1.81	2.38	3.33	3.47	3.44	3.31	83%

Source: SBI Group

CONCLUSION

The implementation of the Tata Consultancy Services (TCS) Bancs system at the State Bank of India (SBI) corresponds to the biggest core systems project that has ever been undertaken. The successful implementation of this project should encourage other large banks to start projects to modernize their core systems. The use of a UNIX –based platform to process more than 100 million accounts every day shows that tier-1 banks can make use of a mainframe as an alternative for their core processing.

Achievements of SBI show that consideration to critical factors is very important in implementing new core systems. The bank's senior management dedication, business line involvement project team staffing and empowerment, as well as extensive employee training all collectively contributed to the project. Management also identified the call for a proven system integrator that had in-depth knowledge in both business as well as technology core systems modernization has let the State bank of India to centralize computer processing and operations functions, offer new banking products and services to all civilians of India, reverse a tendency of customer attrition, and combined its affiliate banks. Furthermore, the bank can now further expand its products offering and enhance customer service.

REFERENCES

1. Rajshekhar, N (2004). 'E-banking the new age banking. Banking in the new millennium', ICFAI Books, pp. 1-36.
2. Shaw, I & Yu, A. (2004). 'An analysis of the impact of internet and competition in banking industry using five force model', International Journal of Marketing, 21, 42-49.
3. Vij M., (2006) 'E-banking: an emerging perspective of of the regulatory and taxation issues', www. Informaworld.com, accessed on 24 July '09.
4. www.statebankofindia.com accessed on 27th June, 2011
5. www.tcs.com/sitecollectiondocuments/case%20studies/bancs_case_sbi.pdf, accessed on 27th June, 2011

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