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# IT – driven Organizational Transformation of Traditional Banks in India – A case study

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## **Abstract**

*Organizational Impact dimension of information system effectiveness has been a weak link in the information systems discipline. The simple reason has been the fact that any organizational study confronts us with a multiplicity of factors and inter-relationships. In the IS literature relating to information systems effectiveness, starting from 1992, the organizational perspective remained hard to conquer. In this case research, we present the story of the organizational transformation of one of the traditional banks in India. Through this step-by-step account of the events starting from the history and previous state of the organization and its information systems, we would like to re-enact how enterprise information systems like the Core Banking Solution (CBS) create changes in the organization. The historical aspects of the organization and its IT systems are examined. Then the implementation of the core banking solution is studied to completely understand the changes in the organization as a result of a major IT change. We find that IT change has a profound impact on the organizational elements like organizational culture, structure and strategy and hence the change is more transformational and not just transactional. It is concluded that change in the enterprise information system can transform even a traditional banking company into a vibrant organization which uses the state of the art technology for providing high quality service to its customers. In short, IT change has expanded the horizons of possibility of banks in India.*

**Keywords:** Organizational impact, organizational transformation, information system effectiveness

## **1.0 Introduction**

“IS community has a powerful story to tell about the transformational impact of information technology. We believe that a significant portion of our research should be macro studies of the impact of IT. It is important for academic colleagues, deans, and managers to understand the transformational power of the technology. Theories of change from the organization studies literature are also appropriate (Agarwal & Lucas, 2005: 381)”.

Enterprise Information Systems are known to create tremendous changes in the organizations in which they are deployed. However, there is still no clarity on what those changes are and how the changes are felt in the various elements of the organization. What sort of change would be most beneficial for the organization and

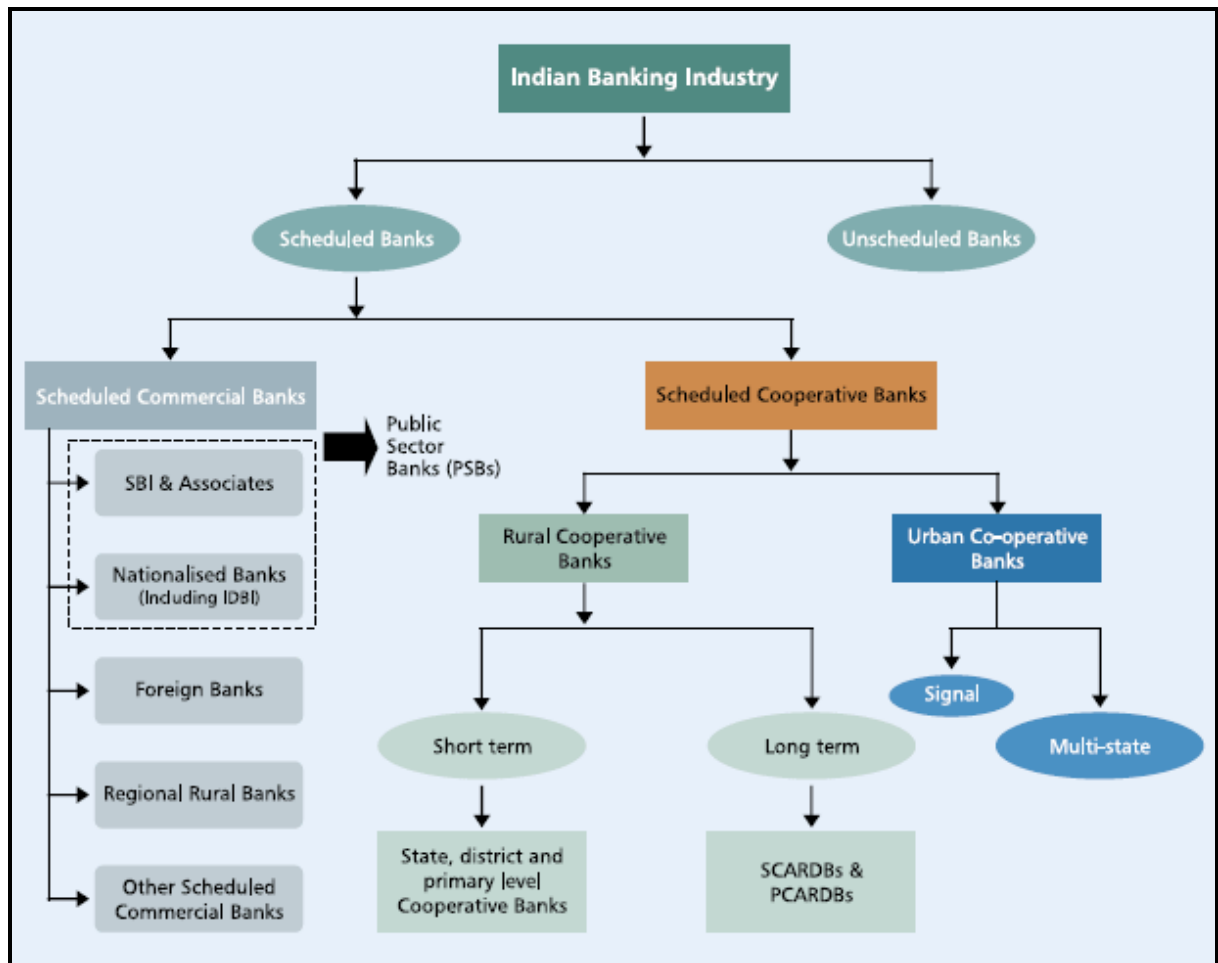
what are the most important factors that influence this sort of a change in systems is still not completely known. This is the story of an amazing organizational change in the Indian Banking industry and will be demonstrated using the case of a leading scheduled commercial bank in India in the private sector.

## **2.0 Context of the Change**

As with any organizational change, the environment of change is very important. The Indian banking space consists of about 300 scheduled banks in the organised sector and several indigenous bankers and money lenders in the unorganized sector who caters to the needs of that section of the population who have not yet become part of the organized banking sector.

### **2.1 The Banking Industry in India:**

The structure of the Indian Banking Industry is displayed below. There are two major groups of banks – the scheduled and the unscheduled banks. Scheduled banks are those banks that are listed in the second schedule of the RBI Act, 1934. Unscheduled banks include Local Area Banks, constituted for special purposes by the government and indigenous money lenders. Local Area Banks have negligible influence, at present, on the industry but the money lenders continue to be force to reckon with in selected pockets in the country. Scheduled Cooperative Banks are banks that are constituted as per the various union and state cooperatives act and work on cooperative principles of mutual assistance. The assets of the cooperative banks account for less than 12% of those of the scheduled banks. Moreover, scheduled commercial banks handle the lion-share of the banking business in India. Of these the public sector banks have a major share. The public sector banks (17 banks) controlled 74% of the total business in 2009, which rose to 83% in 2011. The share of the private sector banks (other scheduled banks) fell from about 18% in 2009 to less than 9% in 2011, as per RBI website (<http://rbi.org.in/home.aspx>).



(Source: <http://www.dnb.co.in/bfsisectorinindia/BankC2.asp>)

Figure 2

A view of the Structure of the Indian Banking Industry

## 2.2 Traditional banks:

Among the scheduled banks, the foreign banks are a totally different breed from the rest of the banks both in character and technology and hence excluded. The regional rural banks form a different category having very few branches and functions with different purpose than the rest of the scheduled banks and are excluded. This leaves us with the public sector banks consisting of the SBI & associates, the nationalized banks and the other banks which comprise mostly of the private sector banks. All the banks that existed prior to the liberalization of the Indian economy in 1991 used conventional banking practices and lesser use of information technology. These can be called traditional banks. Traditional banks in the private sector are generally called old generation private sector banks. As opposed to them, there are a few banks which started banking operations after 1991 and who employed modern technology and more aggressive marketing techniques. They are generally called the new generation private

sector banks. Traditional banks are banks in India which fall in the list of old generation banks which existed for a longer period of time as compared to the new generation banks which resumed their operations after the liberalization of the Indian Economy in 1991. Unlike the older banks, these new generation banks did not have to bear the baggage of legacy systems but had modern information systems. The new generation banks did not need a transformation as they started with a total banking automation (TBA) or Core Banking (CBS) system. The old generation banks faced severe problems like trade unionism, outdated information systems, older staff and legacy systems. But when the government policies changed they got a chance to fight their way up and many banks used it despite the strong opposition / resistance from the user community. Hence the study of the old generation banks is more interesting. The new generation banks were lucky to have been born without these baggages like legacy systems, trade unionism, etc and instead had the advantage of a good capital base and very professional promoters. They had plush good offices, latest technology products and most importantly young staff to man them. Most of these offices were paperless and the ambience of their halls, arrangement of their banking cubicles, where customers virtually sat with the officers to get serviced and most importantly their colourful advertisements lured a young, energetic and dynamic group of business people and executives to shift loyalties from the old generation banks. Despite the high service charges and hidden expenses involved, people loved the speedy services and the professional dealings of these newer banks. Apart from the old generation private sector banks, most of the public sector banks also fall under the category of traditional banks.

### **2.3. Implementation of Enterprise System in Indian Banks:**

The Core Banking Solution (CBS) was implemented in the majority of the traditional Indian Banks in the second half of the first decade of the twenty first century. The move was done primarily out of regulator pressure to modernise banking systems and later on, out of competitive pressure from banks in the peer group. There was little unanimity among the banks in the selection of the enterprise systems to be deployed in their office. But some of the factors that led to the selection of the core banking systems were the existing vendor relationship, nature of the existing information systems and the bank's expertise in the area of Information Technology. The important service providers were Infosys, Tata Consultancy Services (TCS) and Oracle Financial Services Software. But there were a lot of smaller player like Polaris and even some of

the larger banks chose low cost solutions from little known vendors. However, the majority of the banks preferred Finacle (Infosys) and TCS-Bancs (TCS) to the lesser known information systems. Implementation of these systems was no child play and required the services of at least 3 to 4 vendors. A complete rethinking on most of the current business processes was also required. But some of the banks were forced to do not just a business process reengineering but a rethinking of their vision and mission and values. For the larger banks, the implementation took years to get completed and in at least some banks the process is not over yet. The customization and the migration phases were the most difficult and maintaining data integrity was a great challenge. Most of the banks suffered severe teething problems and both customers and the employees took time in overcoming them. By 2010, most of these initial problems were overcome except for minor glitches and most of these systems became reasonably stable. The last few years have seen amazing changes in the banking industry, especially, among the banks which implemented the core banking solutions. This story is presented not just because of the fact that the change in the information systems have resulted in a corresponding change in the business and the organization. It is also because this is the time to evaluate the impact of these systems on the whole organization and hence on the banking industry. Rarely do opportunities come knocking like this when a whole industry has embraced similar type of information system (the core banking solution) and displayed amazing changes. This is an opportunity to see, research and evaluate the real effectiveness of our information systems based on the Indian Banking context. The story also reveals newer aspects. Enterprise Information Systems are capable of creating changes in the so-called stable organizational elements like organizational culture, leadership, structure and even mission because enterprise systems have expanded the range of possibilities and shrunk the world around us. This research represents an on-the-field, practice based work to understand how organizations have changed as a result of a series of IT driven changes. This research is more about the transformational power of enterprise IT solutions and the positive changes that information systems bring with them to make the society a better place to be in.

### **3.0. The Organization**

Federal Bank Limited is one of the leading Indian scheduled commercial bank in the private sector. Its corporate office is at Aluva near Kochi in the state of Kerala in India.

It is the fourth largest bank in India in terms of capital base. As of 20 December 2012, Federal Bank has 1035 branches spread across 24 states in India and 1058 ATMs around the country (across 108 metro centres, 224 urban centres, 384 semi-urban locations and 87 rural areas). Federal Bank opened its 1000th branch at Muthoor, Thiruvalla in Kerala on 17 August 2012 and is planning to hire 2000 professionals by September 2012. The Bank would be the first Bank from Kerala to cross the milestone of 1000 branch network. The bank has ambitious development plans named “Vision 2015” that aims to achieve among others a numero uno position among all the banks in the state of Kerala. The bank may be treated as a mid-sized bank in the company of banks like Yes Bank, Kotak Bank, J & K Bank, etc as different from the large bank category which includes the banks like State Bank of India, Punjab National Bank, Bank of Baroda, etc.

### **3.1. Achievements**

Information Technology Use has resulted in rich dividends for the bank. There are several firsts that the bank can be proud of:

- First, among the traditional banks in the country to introduce Internet Banking Service.
- First among the traditional banks to have all its branches automated.
- First Bank among the traditional Banks in India to have all its branches inter-connected.
- First Bank to offer Electronic Telephone Bill Payment in the country.
- First Bank to have an e-shopping payment gateway.
- First traditional Bank to introduce Mobile Alerts and Mobile Banking service.
- First Bank to implement an Express Remittance Facility from Abroad.
- First in India to provide RTGS facility in all its branches.
- First traditional Bank to issue GDR and get listed in London Stock Exchange
- First bank in India to offer IMPS Facility through Internet Banking

### **3.2. Awards and Laurels**

The bank has obtained several awards due to the strategic use of IT. Some of these are:

- In February 2005 and February 2006, Federal Bank wins two prestigious awards for “Best use of IT in retail banking & best payments initiative” from IBA and TFCI. It is rare for a traditional bank to win this award for best use of IT in Retail Banking for two successive times.

- In January 2007, Federal Bank won the award under category “Best Clearing & Settlement System” in the Banking Technology Awards 2006 instituted by IBA, Infosys & TFCI.
- In January 2009, Bank won the award under category 'Best Customer Relationship Achievement' in the Banking Technology awards 2008 instituted by IBA, Infosys & TFCI for the outstanding achievements in technology infusion and dissemination. The Bank was winning IBA-TFCI awards for the fourth time.
- In January 2012, ACI Excellence Awards 2012 for Banks’s Visa Money Transfer using Debit Cards and Bank’s Aadhar Based Authentication for payments
- In February 2012, For its corporate responsibility initiatives, Bank was awarded with the Global CSR Award for "Best Corporate Social Responsibility Practice Overall"
- In April 2012, Bank received the Golden Peacock Award for Corporate Social Responsibility
- In July 2012, Bank received IDRBT Banking Technology Excellence Awards for year 2011-12 for Best Bank Award among Small Banks for ‘Mobile Banking and Electronic Payments’ and for Best Bank Award among Small Banks for ‘CRM and Business Intelligence Initiatives’.

### **3.3. Financial Performance**

The change in the financial position of the bank from 2005 till 2009 is shown in figure 3. The bank implemented the Finacle core banking solution in 2007 in a record time of 7 months. This table shows the financial positions from 2005 to 2009 i.e., two years prior to the deployment of Finacle and two years after deployment. The changes are noteworthy. This table has been culled out of a large database of 30 years data provided by the Reserve Bank of India to focus on the change due to the CBS.



(All the figures are in lakhs of Indian Rupees)

Year	2005	2006	2007	2008	2009	change 2005-o- 2007	change 2007-o- 2009	change 2005- o-2007 %	change 2007- o-2009 %
No. of Employees (Actual Number)	6474	6015	6029	6945	7570	-445	1541	-6.87364844	25.55979433
Capital	6560	8560	8560	17103	17103	2000	8543	30.48780488	99.80140187
Reserves and Surplus (Reserves + Bal. of Profit - Bal. of Loss)	65776	116438	141660	375466	415484	75884	273824	115.3673072	193.2966257
Deposits	1519288	1787874	2158444	2591336	3219819	639156	1061375	42.06944305	49.17315436
Borrowings	18590	61050	77021	79195	121894	58431	44873	314.3141474	58.26073409
Other Liabilities	71883	90369	123308	187545	110786	51425	-12522	71.53986339	-10.15505888
Investments	579916	627237	703266	1002659	1211897	123350	508631	21.27032191	72.32412771
Advances	882259	1173647	1489910	1890466	2239188	607651	749278	68.87444617	50.29015175
Fixed Assets	18543	17387	18610	23284	28078	67	9468	0.361322332	50.87587319
Other Assets	45787	58770	65893	59687	62215	20106	-3678	43.91202743	-5.581776516
Total Income	140301	165348	210404	291016	383115	70103	172711	49.96614422	82.08541663
Total Expenses (Excluding Provisions and Contingencies)	100260	120130	149106	211604	257138	48846	108032	48.71932974	72.45315413
Profit / (Loss)	9010	22521	29273	36805	50049	20263	20776	224.8945616	70.9732518
Total Expenditure (Including Provisions and Contingencies and Profit / (Loss))	140301	165348	210404	291016	383115	70103	172711	49.96614422	82.08541663

**Figure 3. Change in financial parameters of 2007 and 2009**

Except for some parameters, the bank showed a distinct jump in the performance in the difficult years just after the implementation of IT. Generally these years succeeding an implementation of a major IT product in the length and breadth of an organization would one of confusion, turmoil, revolt and fall in performance. But the bank has astutely managed the whole project that not only was there no fall in the performance but on the contrary there was huge improvement.

#### **4.0. The Information System, the technology and the Service Provider**

The Finacle core banking solution is developed by Infosys and this CBS was implemented by the Federal Bank. Some details of the package are as given below:

##### **4.1. The Core Banking Solution (CBS):**

Core banking stands for the core areas of banking like deposits and advances. CORE also stands for Centralised Online Real-time Environment. The CBS has become a

common terminology for the Indian banks. What CBS provides is to capture the details of the customer and his retail transactions and make it available in a central server on a Real-Time basis so that it is possible for him to withdraw the same from any other location where the service provider has a presence. The CBS has been identified as the right kind of information systems for the Indian Banks and several banks have reported great advantages from its use though the cost of its deployment is prohibitively high especially for smaller banks. Hence there are CBS packages now made available in all cost ranges for variations in scalability and network speed.

#### **4.2. Finacle:**

Finacle is easily the most popular among the core banking solutions available in India in the last decade. The vendor website describes Finacle in this way, “Finacle, the universal banking solution from Infosys, empowers banks to transform their business leveraging technology. The solution addresses the core banking, e-banking, treasury, and wealth management and CRM requirements of retail, corporate and universal banks worldwide. Finacle has been architected out of years of experience with global banks and offers several powerful and differentiating features making it one of the most comprehensive, flexible and scalable solutions in its class.”  
([www.infosys.com/finacle](http://www.infosys.com/finacle))

#### **4.3. Infosys:**

Infosys is the developer of the popular Finacle CBS. Infosys has also been connected with the Federal Bank for a long period. Many of the IT initiatives had the support of Infosys. Their website mentions that “Infosys defines, designs and delivers IT-enabled business solutions that help Global 2000 companies win in a flat world. These solutions focus on providing strategic differentiation and operational superiority to clients. With Infosys, clients are assured of a transparent business partner, world-class processes, speed of execution and the power to stretch their IT budget by leveraging the Global Delivery Model that Infosys pioneered. Infosys has over 80,000 employees in over 39 offices worldwide. Infosys is part of the NASDAQ-100 Index.”  
([www.infosys.com](http://www.infosys.com))

### **5.0 The Story of Organizational change**

Change is a normal happening in organizations in the modern age. A lot of changes take place, of which only a part is intentional. The greatest difficulty in organizational change is to identify the source and drivers of change. What is the cause of the change

is not the concern of this research simply because the researcher doesn't have that sort of control. However, it is clear that Information Systems have a great role in all the changes that are identified as part of this research. Some questions that trouble any one embarking on a study of the organizational change are the following:

- How do you understand the change?
- Who will reveal the change? - Who are those people who have actually experienced it?
- What are the changes?
- What is IT's role in each of these changes?
- Which of these changes are entirely due to IT?

One of the most important requirements for this sort of research is the presence of a group of people who actually experienced the pain and/or ecstasy that the change brings about and who would be able to narrate these experiences without including too much of their personal biases and prejudices. Different organizations went through different processes of change, adopted different information systems and vendors as per their size and the capacity to invest in IT. Hence the experiences of different groups of people have been varied. The customers are the group that actually experience the result of the change and they were generally upbeat about the change in IT systems but in this research, they were found to have little information about the real change. Many of them, understandably, could not go beyond the change in IT. Vendors have a great deal of information on the process of implementation of IT systems and the extent of customization that was required at the different branches of the organizations. However, vendors tend to advertise their product and present a very rosy picture about the whole situation. Hence the real internal users of the system were the only persons who would be able to provide a first-hand information on the changes seen in the organization. Here embark on this journey change to answer the questions that are posed to us by looking at the initial state of the organization. The early history of the bank was obtained from multiple sources - interviews with the bank staff as well as from published and web sources.

### **5.1 History and State of the Bank Before CBS**

The Federal Bank Limited (the erstwhile Travancore Federal Bank Limited) was incorporated with an authorised capital of five thousand Indian Rupees at Nedumpuram, a place near Tiruvalla in Central Travancore on 28/4/1931 under the

Travancore Company's Act. It started business of auction chitty and other banking transactions connected with agriculture and industry. The bank though successful in the earlier periods, suffered setbacks and was on the verge of liquidation. In 1944, Shri K P Hormis, and his close relatives /friends obtained a controlling stake in the Bank. In 1945, the paid up capital was increased to 71000 Indian Rupees. The Board of Directors of the Bank was reconstituted in 1945 and fresh Articles of Association adopted. On 18-5-1945, the Registered Office of the Bank was shifted to Aluva and the Bank commenced business by opening its first branch at Aluva. In 1946, the Bank opened its second branch at Angamali (on 26-1-1946). In the Board Meeting held on 24-3-1947, it was resolved to change the name of the Bank as "The Federal Bank Limited". The third branch of the Bank was opened at Perumbavoor on 18-4-1947. The Bank was licensed under Sec.22 of the Banking Companies Act, 1949 on 11-7-1959. Bank floated several kuries one after another. It also introduced several new deposit schemes. These strategies helped the Bank to grow at a greater pace in the initial days.

#### **5.1.1. Mergers & Acquisitions:**

After 1964, The Bank embarked for a massive takeover bids, which accelerated its growth horizontally and vertically. In that process it took over the assets and liabilities of the following banks in 1964 and later.

1. The Chalakudy Public Bank Ltd., Chalakudy
2. The Cochin Union Bank Ltd., Trichur
3. The Alleppey Bank Ltd., Alleppey
4. The St. George Union Bank Ltd. Puthenpally in 1965
5. The Marthandom Commercial Bank Ltd. Trivandrum in 1968

The Bank became a Scheduled Commercial Bank in 1970.

#### **5.1.2. Expansions:**

1972 witnessed expansion of the bank beyond the home state. The Bank became an Authorised Dealer in Foreign Exchange in 1972 and the International Banking Department started functioning from Mumbai in 1973. Since then, the Bank has substantially increased its market share of the NRI business. The International Banking Department was later shifted to Cochin in 1982 as part of consolidation and centralization of activities. Massive branch expansion took place during the period from 1973 to 1977. To reflect the bank's approach towards Industrial finance, it

adopted a new emblem – A Farmer in action encircled by an industrial wheel. There was a great increase in the business during the period.



**Figure 4. The Emblem of Federal Bank Ltd**

In 1975, the Bank opened 53 branches and in 1976 it opened 42 branches. The total number of branches reached 276 from a position of 114 in 1973. The paid up capital was increased to Rs.100 Lakhs from a position of Rs.10.66 Lakhs in 1977. Mr.V.Vergheese took over the reins of the bank as Chairman and Chief Executive Officer on the 2<sup>nd</sup> July 1980. He was instrumental in the introduction of time tested and proven methods of management in the organization. Shri. V. K. Syamasundaran took over as Chairman and Chief Executive Officer of the Bank as a successor to Mr.V.Vergheese on 16.07.1983. The foundation stone of the multi-storied Administrative Building was laid by the Founder Shri K.P.Hormis on 26.12.1983 which is shown in figure 5.



**Figure 5. A view of the Federal Towers at Aluva**

### **5.1.3. Redesigning the Organization:**

As recommended by National Institute of Bank Management in November, 1984, Bank has introduced Three Tier Organizational Setup with Head Office, Regional Offices

and Branches. Agricultural Finance Department was set up in Head Office with technically qualified personnel at central office and field level. Bank's performance in the field of agricultural and priority sector lending improved substantially thereafter. In 1985, in tune with the NIBM recommendation, Personnel and Industrial Relations Department was set up in July, 1985. With the active assistance of Tata Consultancy Services, bank also set up its computer department. A WIPRO computer was installed at our Head Office on July, 1985 paving the way for computerization of the Bank. Later, a PSI microcomputer was installed at our International Banking Department at Cochin. The first Advanced Ledger Posting Machine (ALPM-a Wipro banker) was installed at the bank's Bank Junction branch at Aluva. The long cherished dream of the Federal Bank, the multi-storied administrative building complex was inaugurated by Shri. A Ghosh, Dy. Governor, Reserve Bank of India in 1987. Shri. M. P. K. Nair , a seasoned commercial banker trained in the Union Bank of India assumed the captaincy of the Bank on 01.07.1988 as its Chairman and Chief Executive Officer. In 1989, the Merchant Banking Operations were commenced. Deposits crossed Rs.10,000 Million in the year 1992. The bank adopted "profit sector banking" as its slogan during the same period. In 1993, the ICICI group was roped in as a shareholder through private placement. The public issue of the bank in March, 1994 was oversubscribed by about 60 times. Leasing Business was also started by the bank in the year 1994.

#### **5.1.4. More Prominence Given to Use of Technology:**

In 1995, the bank registered 142.44% increase in Profit After Tax. During the period 1991-96, the bank registered a CAGR of 78.13% in PAT. By 1996, Federal Bank had actually emerged as a perfect banking partner with diverse products, global reach and focus on automation and HRM. Deposits at this stage crossed the Rs.35,000 Million mark. Shri. K Nandan, took stewardship of the bank on 01.01.1996. The bank had a steady growth. The bank's business crossed the Rs.100000 Million mark as on 31.03.1998 for the first time. Bank's first ATM was inaugurated at Ernakulam North on 27.02.1997. On 01.01.1999, Shri. K.P.Padmakumar, the Executive Director of the Bank became the first Chairman and Chief Executive Officer of the bank to have risen from the rank and file of the bank. The 400th branch of the bank was inaugurated at Calcutta- Shakespeare Sarani on 19.02.1999. The total business of the bank exceeded Rs.110000 Million as on 31.03.1999. On 24.1.2000 Bank started Any Where Banking at Bangalore connecting all branches located in the Bangalore metro. It launched

Depository Services in association with NSDL on 24.02.2000. On 24<sup>th</sup> April 2000, the Bank has commenced Internet Banking designated 'FedNet' with software support from Infosys Technologies Ltd. In March 2001, Wide Area Network was launched connecting Regional Offices at Mumbai, Bangalore, Chennai, Ernakulam and Chennai Funds & Investment branch with Head Office. All the 412 branches of the Bank were fully computerized (using FedSoft) as on 31.03.2002. The Installation of switch for networking all the ATMs, already installed/proposed to be installed, started from 17.08.2002. By December 10, 2002, Federal Bank introduces FedAlerts, and FedMobile, another first of its kind service among traditional banks in India. Real time transaction alerts across the globe, and customizable options make the service unique at this point of time. In 2003, International Debit Cards were launched by the bank. In January 2004, Federal Bank becomes the first traditional bank to network all its branches and attain 100% connectivity. Soon, in February 2004, Co-branded credit cards were launched in association with ICICI Bank. In October 2004, RTGS is enabled in all branches of the Bank and becomes the first bank in India to implement RTGS facility in all the branches. During this period, online Railway Reservation through FedNet was also launched. The First Kiosk was inaugurated at the Marine Drive (Kochi) branch. In December 2004, Federal Bank became the first bank to launch automated telephone bill payment through Interactive Voice Response System (IVR). Bank launched an innovative product 'Fed-e-Pay' for automated payment of utility Bills. In February 2005, Federal Bank is awarded for Best Use of Information Technology in Retail Banking by IBA and Infosys. The award reveals the strength and innovation in technology initiatives of the bank during the last decade. In May 2005, Shri.M.Venugopalan, the Chairman and Managing Director of Bank of India joined the Bank as Chairman and Chief Executive Officer. This provided impetus to the bank's technology initiatives. In June 2005, Federal Bank in association with AMRITA super specialty hospital launches Fed+Amrita, an innovative online system for fixing medical consultation, Health checkup, and inpatient payments from anywhere. In January 2006, Federal Bank becomes the first traditional bank to successfully issue GDR. While the issue of 18 million Global Depository Receipts realized \$71.46 million, the green shoe option of 2 million GDR was also fully subscribed, bringing in a total of \$80 million to the bank. The GDR, each representing an underlying equity share, were priced at \$3.97 each — working out to approximately Rs.175 per share. The issue was subscribed by major banks and Financial Institutions across the globe. In September 2006, Ganesh

Bank of Kurundwad was amalgamated with Federal Bank. The total No. of branches crossed 500. In November 2006, Federal Bank entered into Life Insurance Joint Venture with IDBI & FORTIS. In March 2007, a full-fledged Data Center was set up by the Bank.

#### **5.1.5. The Core Banking Solution Era:**

In June 2007, Bank formed a Centralized Processing Centre for centralizing the account opening process to make it quick and efficient. By September 2007, all branches/offices of the Bank were migrated to Centralised Banking Solution (CBS), Finacle. This is the fastest implementation of a Core Banking Product by a bank in India. The roll out of the Finacle was completed within 9 months. In January 2008, the bank successfully completed 1:1 Rights Issue and opened its first overseas representative office at Abu Dhabi, UAE. By March 2008, Bank's total No. of Branches crossed 600. The Asian Banker, together with the Technology Advisory Council of The Asian Banker Summit, has affirmed Federal Bank as sole recipient of the Best Core Banking Project Award 2007. In September 2008, Bank started providing Online Stock Trading facility to the customers in association with M/s Geojit Financial Services. The total Business of the Bank crossed Rs. 50,000 crores in March 2009 and the bank became BASEL-II compliant.

#### **5.1.6. New Businesses – New Products – Newer facilities:**

In August 2009, Bank took an important step in customer Service by dedicating 24 X 7 Contact Center to the customers. It started offering NEFT/RTGS facility through Internet Banking. It also started offering Telebanking facility through a Toll-free number. Further, three new variants of Visa Debit Cards – Platinum, Gold and Shop'n Save were launched. In January 2010, the Point Of Sale (POS) Terminal Business was also launched. In June 2010, Federal Bank became part of National Financial Switch ATM Network – the largest ATM network in India. In July 2010, while the total number of branches crossed 700, Federal bank launched Debit Cards in association with MasterCard. Meanwhile, it received the Financial Express-India's Best Banks Award 2009-10. In September 2010, Mr. Shyam Srinivasan has taken charge as 8th MD & CEO of Federal Bank and Federal Bank had the rare privilege to become the official partner to the one day international cricket match between India & Australia. The Bank's financial inclusion product FEDJYOTHI is launched and FEDJYOTHI



smart cards released at Alapuzha on 18th December 2010. In February 2011, Federal Reach, the in house publication from the Bank received the Kerala Management Association Excellence Award for the Best Corporate Magazine published /received during the calendar year 2010. In March 2011, The first Gram Jeevan Branch at Thuruthy Vengoor West was inaugurated by Shri. P. C. Cyriac, Chairman, Board of Directors. In May 2011, Bank makes its presence felt in the state of Jammu by opening its 1st branch in the state. In June 2011, The Bank launched an instant online remittance solution to the visa debit card holders across the country, in association with Visa, the first Bank in India to do so. In July 2011, the general insurance cover for the customers for stabilizing the relationship with the clients is launched. In August 2011, Federal Bank was ranked 497th in the world by the THE BANKER, the international financial affairs published from London. The Bank also received the IDRBT Best Bank Award for the year 2010-11, for the category IT for internal effectiveness among small Banks. In September 2011, FED Delight, the bank's gift card and Fed Pravasi Oriental Insurance for NRI Patrons are launched. Bank's Noida Branch was awarded the Best Performer on National Level in the SIP campaign by Reliance Insurance Co. The Pre sale launch of CASH PASSPORT was done at Cochin International Airport.

#### **5.1.7. The Last One Year:**

Bank was honored with memento for its financial inclusion drive at 13 allotted villages in Trivandrum during the declaration function of Total Financial Inclusion of Kerala in October 2011. Bank made arrangements with DBFS (Doha Brokerage and Financial Services Ltd) for PIS. NRI customers will have an option to choose between Geojit BNP Paribas Limited and DBFS Securities Ltd for trading in securities through PIS. Bank opened 66 branches to reach 823 in figures across the length and breadth of our nation on the occasion of its 66th Founders Day on 18th October, 2011. In November 2011, the bank launched its centralized Savings Bank Accounts opening system. The bank also launched its second Customer Care Contact Centre manned by the differently abled and a new Current Account product of our Bank – "FED-ELITE". Memorandum of Understanding was signed with LIC of India for offering e-Payment services for all Divisional Offices of LIC across the country. The bank also launched its prestigious loyalty reward program – the Utsav rewards. Bank opened its 1000th branch at Muthoor, Thiruvalla, Kerala on 17th August 2012

### **5.1.8. To Sum Up:**

The involvement of professional bodies like NIBM, TCS, etc can be seen in the early days of the bank. Given that involvement of these players could have been very costly even at that period of time, this is an indication of the seriousness that the bank's management had towards the IT and organizational development. It is no surprise that the bank was able to carry forward its founding values and achieve great laurels. Great importance was given to IT and it can be seen that IT and business growing in tandem. A high level of alignment of these two functions can be visualised in this bank. Among other reasons for this is the presence of a joint committee of IT and business leaders of the bank which ensures that IT is a major tool for business growth.

### **5.2 History and State of the IT organization before CBS**

The main Objectives of the deployment of the Information systems in the bank were the following:

- To Obtain “Sustainability and Stability” to the IT assets
- To obtain more control to the IT operations
- To give more focus to Business Growth by spending less time for back office works and preparation of MIS reports.
- To improve Customer Service with less time spend for services like cheque book issue, report generations, etc
- To bring about alternate channels of banking
- To bring about operational efficiency: By reducing the cost to income at branches
- Scalability of operations
- To ensure a seamless integration of the organization for better customer service

The single most important achievement of the bank has been the existence of a proactive IT department. The bank can easily boast of having a strong IT department which is well structured, with divisions like development, operations, etc in addition to a group that meets quite frequently to address the apprehensions of the banking community about the bank's IT initiatives. This department is completely responsible for all the IT related activities like planning, development and maintenance of bank's IT products. There seems to be little interference in its functioning from the other departments. It all started as a Computer department in the early 1980s. The name got changed to DP department after the kind of work performed then. The real importance

of the IT department was first realized for the implementation of the centralized payroll software for the bank. This was probably the first IT initiative of the Data Processing Department. The ALPM implementation was also taken during the early 1990s till the middle of last decade of the 20<sup>th</sup> century when the bank started planning for single uniform software in all its branches. The Systems department (name changed then) was behind the development, implementation and maintenance of this software for the next ten years. The selection and implementation of the Finance was also the job of this department. In 1996, the bank undertook a three year Information Technology Strategic Plan 2000 for automating its branches in a phased programme. From 1997 onwards the bank initiated on a process of develop – deploy – refine process of Fedsoft, the automation software package which was developed in-house by the bank’s own IT department. In the first year (1997) itself it was deployed in and was used by 40 branches. The software was developed by the bank in collaboration with Datnet Corporation, Bangalore and the package was based on the state-of-the-art technology and the latest workflow concepts at that time. An Automatic Teller Machine (ATM) was installed at the Vile Parle branch in Mumbai during the year. Federal Bank Ltd. also set up its site on the World Wide Web on the Internet to provide information about the bank and its products and services [<http://www.federal-bank.com>]. In the following year the bank forayed into internet banking and E-commerce. The Bank also entered into marketing pacts with some commercial agencies for its E-commerce business. It tied up with Escotel Communications to launch mobile banking services using SMS technology. In 2003, it unveiled the Anywhere Banking which provides the convenience of doing transactions from any of the 300-plus interconnected branches. 100% interconnectivity among all its branches in 2004 and Federal Bank introduces new Fed e-Pay services in the same year. By 2007, the complete roll out of its Core banking Solution in all branches was done.

**5.2.1. Important Information Systems:**

Type of the Information system	specific name of the information system	Vendor developed or in-house developed?	vendors involved in the deployment	Role of the vendor in the project	No of branches in which the system was deployment
ALPM (1992 to 1996)	several names	vendor	Usha, DCM, etc	supplier & maintenance of hardware	About 50 branches

				& software	
TBA (1997 to 2007)	FED Soft	in-house developed	Datanet Corp	hardware support for PC & servers	All the branches
CBS (2007 onwards)	Finacle	VENDOR	INFOSYS	COMPLETE	All the branches

**Figure 6. Important Information Systems**

Legends:

ALPMs: ALPMs stand for Advanced Ledger Posting Machines. Ledgers are the books of accounts used at bank branches for recording customer transactions. Posting is the process of recording the transactions in these ledgers. Hence the primary function of these machines is to ensure electronic recording of the transactions at the bank.

Total Banking Automation (TBA): The improvements in the networking technology and the increased use of more efficient architectures like the client-server led to various networked solutions. There were mainly three TBA systems - Kale TBA (UNIX based, not user friendly and hence not successful), Veermathy Systems and Fed soft, the bank's own software)

CBS: Core Banking Solution

### **5.2.2. To Sum Up:**

The single most important achievement of the bank has been the existence of a very strong and very proactive IT department and an equally strong IT leadership. This led to a hugely successful IT management in the bank.

### **5.3. The Implementation of CBS**

The Objectives of the CBS was the need for achieving scalability in the business. There was also a need to implement the latest banking products and using the latest technology was the only option. The failure of the previous distributed database system to effectively address the needs of the banking community added to the need for CBS. The increasing competition among banks hastened the implementation of the CBS. The final decision to go for a CBS was also a futuristic decision rather than just need based.

### **5.3.1. Team Selection/formation Details:**

A well planned procedure was followed for forming the team for the project. The bank was able to do this process with considerable ease since it had a very proactive IT department and which had a good number of personnel trained in the latest technology. Five main teams were formed to oversee the CBS implementation.

- 1) Top Business Team: There was a business Team for CBS and it was a high level team formed from among the top executives of the bank
- 2) Core Team at Infosys (Vendor): This team was selected by completely by Infosys and bank had little say in the selection process other than suggest names.
- 3) Core Team at the IT department to oversee the complete implementation: Senior Team at the IT department who controlled different aspects of the whole project. They also addressed the special issues that rise occasionally.
- 4) Core Operational Team to oversee the migration aspects: To address the data migration issues and the week end updation of the central database
- 5) Implementation Team who were selected based on their earlier experience in IT projects were the field staff for the project

### **5.3.2. Structure of the Software:**

The different layers of the Finacle Core Banking System are as follows:

1. Core Layer: The core layer can only be changed by Infosys and this will result in a new version of the software. This was resorted to as an extreme step and done rarely.
2. Customizable layer: Depending upon the problem faced by the users, the top systems team at the Federal Bank IT department can make suitable changes to this layer.
3. Day to day changes: Operations team at the Federal Bank have been given the rights to make suitable changes for the smooth functioning of the bank. These are mostly parameter changes and rate changes.

### **5.3.3. To Sum Up:**

The Quality of the System Being Implemented and the presence of a well-tested procedure and focused teams led to a successful implementation

## **5.4. The Organizational Change after Implementation of CBS**

The effectiveness of an enterprise system like the CBS depended to a large extent on the integration of the organization into one coordinated unit rather than be comprised of disparate and separate departments and branches. This needed not just a linking together of the different entities by computer networks, rather the attitudes of the people involved needed a change. This was harder to achieve and took more time than that involved in physical networking. Hence the bank embarked on centralised and localised training for the personnel at various levels. The other measure was to create systems at each important department that once used manual systems and make them also a cog in the wheel of complete integration. Several changes were seen in this regard and they are all responsible for making the organizational change more profound and stable. Only the major changes are described in brief.

- 1) Creation of Regional Credit Hubs with online loan processing systems:  
Banking is taking deposits from the public and lending them at a slightly higher rate to the needy. This difference between the deposit rate and the loan rate is bank's income. Have a leaky credit portfolio is the reason for the downfall of many a banks. As a first step to improve the asset quality, the loan processing systems are made online by the bank. Since these systems are linked with the CBS the customer profile and other details can be available readily and the speed of processing improves substantially. As an alternate step the loans proposals are being forwarded by the branches to a nearby credit processing centre called the Credit Hub, who will scrutinize the applications and make sure that the branches are indeed doing the right things. This will greatly enhance the organizational effectiveness and the role of IT is quite high in these hubs.
- 2) New fund transfer mechanisms like Real Time Gross Settlement (RTGS) & National Electronic Fund Transfer (NEFT) have been linked to the CBS: These are well established fund transfer products developed by Reserve Bank of India and when these are linked to the CBS, they can be utilised well by the customers. Direct credit of inward remittance to beneficiary accounts is possible now.
- 3) Newer technology products introduced: With newer channels appearing, new online banking and home banking products have been introduced
- 4) CBS can handle more transactions: Scalability was a big problem with the earlier systems and this could be overcome now.

- 5) Anywhere banking facility enabled: Customers can deposit and withdraw from any branch, which means that there is no need to walk in to your home branch itself.
- 6) MIS centralised at central office: The greatest problem with older systems that had distributed databases were that data for generating MIS reports had to be either pooled using a separate process or had to be generated at each of the branches. Now everything can be done centrally and the branches can focus on business generation
- 7) Interest application made automatic: Interest application of accounts used to take huge time in previous systems since this had to be done partially manually. Now this has become an automatic task which is done by the system and in many cases not even known to the staff performing it.
- 8) Tax deduction at source made automatic: Tax deduction used to be carried out manually and was the task which used to create a lot of mistakes. This also has become automatic.
- 9) Strategy change to focus on marketing at branches and marketing teams were formed
- 10) Non-Performing Asset classification and recognition made easy
- 11) Online HR system introduced: Training Systems have improved a lot. New reward schemes have got introduced and with IT help, online credit of incentives is possible. Leave Systems have become completely online and easy. Mentoring systems for new employees have also been introduced and there are many online mechanisms for obtain advice from your mentor and to provide suggestions.
- 12) Ambitious short term targets can be achieved by using IT systems. Planning has become an area of great improvement with increased use of IT systems for budgeting and planning
- 13) Business Analytics division introduced and will be helpful in identifying the problems faced by different branches
- 14) Change in the Vision, Mission and Values

Overall change in the organization: The bank has been in the path of change right from 1997 when they initiated an IT driven change in the bank. Hence the change of IT systems in the 2006-2007 period did not become a very prominent one for the bank. As the Chief Manager (IT) put it, "In 2005 itself, we had all the banking channels

including internet banking and mobile alerts in place. We had our ATM network and most of what a CBS was expected to offer other banks. Hence, when the CBS was actually in place, our employees were not shocked as many of the other bank employees felt”.

**5.4.1. To Sum Up:**

On the whole, CBS gave the bank a smooth banking experience with new banking channels and the seamlessly integrated system working in tandem in a way which has never been felt before by the bank before. The change did not have a shocking effect on the staff as they were used to the GUI interface before. But these changes demonstrate clearly that Enterprise Information Systems are capable of creating changes in the so-called stable organizational elements like organizational culture, leadership, structure and even mission because enterprise systems have expanded the range of possibilities and shrunk the world around us.

**5.5 Opinion of the Staff about the Information Systems**

An opinion survey was conducted on the staff of the bank and the following table 7 summarises the results:

system quality	4.60
information quality	4.99
individual impact	5.13
organizational impact	5.00
user satisfaction	5.35
Overall	5.74

**Table 7. Scorecard showing Opinion of the Staff**

A seven point scale was used for the survey. It is clear that the Internal Users of the bank has a good opinion of the bank’s Core Banking System.



## **6.0 Findings, Conclusions & Future Research**

This research focussed on obtaining the changes in an organization due the implementation of a new enterprise system. The transformation in this organization has forced others to stand up and take note of them. It is hard to believe that IT has such a great transforming power. The important lesson is that when the process of implementation of IT is done by capable people with devotion and by following the right processes, the organizational change would make the organization a more effective one. Both IT and Organizational factors are responsible for this sort of a good change. The strength of the IT organization will be tested severely during the period of change. The support of the top management of the organization will be the critical factor in any change management. A summary of the findings of the case would be in order at this stage. A stage by stage summary is preferred to a generic one as it would be more productive.

### **6.1. Organizational History:**

From the historical study of the organization, we find that IT change has led tremendous growth in the organization. By adopting a step-by-step chronological study, we find that at each new step in the history of the organization, IT had a great role to play. In the last one year, the growth of the bank was tremendous. The involvement of professional bodies like NIBM, TCS, etc can be seen in the early days of the bank and this helped lay a solid foundation to the bank. Given that involvement of these players could have been very costly even at that period of time, this is an indication of the seriousness that the bank's management had towards the IT and organizational development. It is no surprise that the bank was able to carry forward its founding values and achieve great laurels. Great importance was given to IT and it can be seen that IT and business have been growing in tandem. A high level of alignment of these two functions can be seen in this bank. Among other reasons for this is the presence of a joint committee of IT and business leaders of the bank which ensures that IT is a major tool for business growth. All this shows that for a great organizational change, the previous state of the organization will have a great bearing on the change.

### **6.2. IT Organizational History and IT Department:**

The single most important achievement of the bank has been the existence of a very strong and very proactive IT department and an equally strong IT leadership. This led to a hugely successful IT management in the bank. The IT strength is primarily the

quality and number of the IT personnel. The strength of the IT infrastructure is the next deciding factor for a great change.

### **6.3. CBS Implementation:**

The Quality of the System Being Implemented and the presence of a well-tested procedure and focused teams led to a successful implementation. Quality of System is the primary requirement here. Involvement of the teams will be crucial. Role of the IT leadership is to be emphasized for a great change. The pilot studies and the procedures followed are of great significance.

### **6.4. Organizational changes:**

CBS gave the bank a smooth banking experience with new banking channels and the seamlessly integrated system working in tandem in a way which has never been felt before by the bank. The change did not have a shocking effect on the staff as they were used to the GUI interface before. The change was not restricted to any department or office. Only a seamlessly integrated organization can experience the right kind of results from an enterprise system.

### **6.5. Staff Opinion:**

Internal Users of the bank has a good opinion of the bank's Core Banking System. A high score can be seen in system quality, information quality, individual impact, organizational impact, user satisfaction and overall impact.

In short, Enterprise Information Systems are capable of creating changes in the so-called stable organizational elements like organizational culture, leadership, structure and even mission because enterprise systems have expanded the range of possibilities and shrunk the world around us.

### **6.6. Limitations**

Two major limitations strike us as we complete this case research. The first is that, though we are sure that Information Technology change is the primary reason for the changes we have spelt out in this paper, there may be other important factors like policy changes in the bank, the change in governmental policies external to the bank, etc that would play a possible larger role. Hence we need to explain how much IT is responsible for the each of these changes. This is not an objective of this research and hence not done. The second limitation is the use of a single case for identifying the organizational changes. To overcome this limitation, two additional cases were done by the researcher but they are yet to be completely documented and hence not in a

presentable form. It would be interesting to present this paper after all the three cases are complete.

#### **6.6. Further research**

Further research is required on identifying and classifying the factors responsible for this change. We have identified an organization that has shown the positive traits more than the negative ones. There are several organizations who have shown mixed results or poor results. More work is required to completely bring these changes and subject them to a complete comparative analysis.

#### **6.7. Significance and Implications**

Further research is required on identifying and classifying the factors responsible for this change. We have identified an organization that has shown the positive traits more than the negative ones. There are several organizations who have shown mixed results or poor results. More work is required to completely bring these changes and subject them to a complete comparative analysis.

This research would trigger a spurt of research in each of these change areas and a lot value addition is sure to follow. Even in those cases where the change may seem to be obvious, the existing problems related to this field can be brought to light

#### **6.8 Permissions and Sanctions**

Written permission from the bank was obtained from the bank from doing this case study research. The details would be made available on demand in writing.

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