**Emerging trends & technology changing landscape of Indian banking sector**

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***Abstract***

*The Financial sector in India acts as the nervous system for the Indian economy and for its economic development. The banking industry worldwide is being transformed include technological innovation of financial services at the national level and opening-up to international competition and equally important changes in corporate behaviour, such as growing financial market and increased emphasis on shareholder value in investment. Emerging market in banking sector which were already growing faster than their developed in worldwide even if some banks face financial crisis situation. The Indian economy ranked 10th in the world at $1.8 trillion of GDP, and its ranking and size are expected to increase to 8th and $2.3 trillion, respectively, by 2014 according to the latest IMF World Economic Outlook.*

*As per financial report study World 25 largest banks by market capitalization go towards emerging markets in different financial sources & resources as per accounting system as per one third of global banking revenue generate 46% & profit will 35% in year 2020. Indian banking industry is gradually moving towards adopting the best practices in accounting, corporate governance and risk management. The convergence with the International Financial Reporting Standards (IFRS) may also place additional demands on the banks’ technical as well as human resources. According to the KPMG-CII study, it is estimated that Indian banking sector will spend Rs 416 billion ($6.75 billion) on IT products and services in 2013, which will be a 13% increase from Rs 370 billion ($6.0 billion) spent in 2012. The primary function of banks is to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans etc. The Emerging Issues are in banking sector Financial Innovations, Retail Banking, net banking, online payment mode etc.*

**Keywords**- Banking revolution, Economic forums, GDP status, Emerging Issues, financial activity

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**Introduction**

The state of report in 2050, to estimate that by that date the E7 economies could be larger than the current G7 by between 25% and 75% depending on the measure used. In September 2006, we published a follow-up report looking at the implications of this growth for global energy consumption, carbon emissions and climate change policy. Now, in this third report, we turn our attention to the implications for banking: will China, India and other E7 economies also come to dominate this sector of the world economy.

To explore extended our original GDP growth model to encompass banking assets and profits. Projections of banking assets are all very well, but for potential new entrants or acquirers in the emerging markets, it is the size of profits pools that matters most. To get some insight into how these might develop, we carried out an analysis of a large bank profits. Focusing on the period since 2000 (or, in some cases, just the latest data for 2005 where this seemed more reliable5). International and domestic economic developments posed challenges to the banking sector during the year 2011-12. However, higher capital standards, stricter liquidity and leverage ratios and a more cautious approach to risk likely rising the funding costs of banks. Compliance with Basel III stipulations along with the credit needs of a growing economy will require banks to tap various avenues to raise capital. Broad estimates suggest that for public sector banks, the incremental equity requirement due to implementation of Basel III norms by March 2018 is expected to be approximately `750-800 billion. Meeting these capital requirements will entail the use of innovative and attractive market based funding channels by the banks.

The convergence with the International Financial Reporting Standards (IFRS) may also place additional demands on the banks’ technical as well as human resources. In emerging and developing economies (EDEs), the risks of potentially large negative spillovers have increased. Domestically, the macroeconomic situation continues to raise concerns. Even as growth has slowed significantly, inflation remains well beyond the comfort level of the Reserve Bank. With the advent of the process of liberalisation in the early’ nineties, the demands on banks’ resources and capabilities increased as banks had to match the challenges of being financial service providers in a globalised, competitive environment. Indian economy should ensure that the banking system continues to play a positive role in supporting the financing needs of our growing economy.

*“Despite increasing risks both in domestic and global macroeconomic conditions, the financial system of India remains robust. However, the concern over evolving global risks and domestic factors still looms large”*- RBI

**Objectives Study**

1. To identify the emerging trends in the profitability of commercial banks operating in India.
2. To evaluate the relative profitability performance of banks during the rising technological period.
3. To analysis the banking innovations after computerization and technical forms all national & public sector banks in India.

**Research Methodology**

Data collection Methods ---

* Secondary Data --- I propose to get the secondary data from the available sources like Internet, Newspapers, journals & Books and Magazines.

The methodological approach can be seen at various levels, for instance in the selection of research projects for select topics involving qualitative analysis methodological aspects. The present research work is based on the secondary data on Banking Reports on Currency and Finance, Banking Statistics – Basic Statistical Returns (all brought out by the Reserve Bank of India, Mumbai). The data used for study pertains to the period from 1981–2007. In this study, the ratio of net profits to working funds has been used to measure profitability of the banks.

**Significance of the Study**

Technology in all spheres of financial and banking sectors is a deep reality in India. The sector has enabled the banking sector to go beyond its traditional role and is now playing an increasingly important role in its key areas of operation as securitization, risks preference and liquidity among others to which technology helps in a big way. It has assumed such high levels that it is no longer possible for banks to manage their technology implementations on a standalone basis. With I.T. revolution, banks are increasingly interconnecting their computer systems not only across branches in a city but also to other geographic locations which high-speed network infrastructure and setting up local areas and networks are now exposed to a growing number. The customers have high expectations and have become more demanding now as they are also more techno-savvy as Compared to their counterparts of the yesteryears. They demand instant, anything and anywhere banking facilities. Though Reserve Bank of India has formulated many policies on adoption of I.T. in the overall working of the commercial banks in India, yet there is an urgent need to address the issues involved in this respect to compete with the banks at international level.

**Literature Review**

“Indian Banking since Independence”, studied the growth of banking in India covering the period from 1966-1987. The analysis revealed that the structure of the banking system changed considerable over the years. It was further pointed out that the quantitative growth of the public sector banks was no doubt significant in some of the areas, but qualitative improvement, by and large lacked in desired standards. In spite of substantial increase in deposit mobilization, their share in national income continued to be very low. It was concluded that the public sector banks were neither guided by the consideration of returns nor were they very much concerned with developmental strategies.

**Chawla, A.S.(2006)** made an attempt to analyze the emerging trends in profits and profitability of four banks, two each from public sector and private sector banks.9.Sanjay J. Bhayani(2006) in his study, “Performance of New India Private Banks: A Comparative Study”, analyzed the performance of new private sector banks with the help of CAMEL model. The study covered 4 leading private sector banks- ICICI,HDFC, UTI and IDBI for a period of 5 years from 2000-01 to 2004-05.It is revealed that the aggregate performance of IDBI Bank is best among all the banks,

**Chowdari Prasad and K.S. Srinivasa Rao (2004)** “Private Sector Banking in India- A SWOT Analysis” studied the performance of all private sector banks. As per the criteria selected like efficiency, financial strength, profitability and size of scale, it is revealed that the private sector banks are in position to offer cost-effective, efficient products and services to their customers using technology, best utilization of human resources along with professional management and corporate governance principles.

**Shroff FT (2007) in his paper, Modern Banking Technology,** - Bank net Publications has given a summary of how Indian banking system has evolved over the year. The paper discusses some issues face by these systems. The author also gives examples of comparable banking system for other countries and the lesson learnt. Indian banking is at the threshold of the paradigm shift. The application of technology and product innovations is bringing about structure change in the Indian banking system.

**Subbaroo PS (2007)**,the major trends that change the banking industry world over, consolidation of players through mergers and acquisitions globalization of players, development of new technology, universal banking and human resource in banking, profitability, rural banking and risk management. Banks will have to gear up to meet stringent prudential capital adequacy norms under Basel I and II, the free trade agreements. Banks will also have to cope with challenges posed by technological innovations in banking.

**Research Analysis study Emerging Trends in Banking**

* Financial Inclusion
* Mobile Banking
* Electronic Payments
* CRM Initiatives
* IT Implementation and Management
* IT for Internal Effectiveness
* Managing IT for business innovation

**Technological Development in Banks**

Developments in the field of technology strongly supports the growth and inclusiveness of the banking sector by facilitating inclusive economic and GDP growth. IT improves the front end operations with back end operations and helps in bringing down the transaction costs for the customers. The important events in the field of IT in the banking sector in India are:

* Arrival of card-based payments- Debit/ Credit card in late 1980s and 90s.
* Introduction of Electronic Fund Transfer (EFT) in early 2000s.
* Introduction of RTGS in March 2004 in India.
* Introduction of Electronic Clearing Services (ECS) in late 1990s.
* Introduction of National Electronic Fund Transfer (NEFT) as a replacement to Electronic Fund Transfer/Special Electronic Fund Transfer in 2005/2006.

**E Cheques -Electronic Payment Services -**

Nowadays Indian bank operates new trends like e-governance, e-mail, e-commerce, e-tail etc. In the same manner, a new technology is being developed primarily in federal bank of America for introduction of e-cheque, which will eventually replace the conventional paper cheque and it will operate in India also. E-cheque is a Negotiable Instruments which Act has already been amended to include.

**RTGC- Real Time Gross Settlement**

March 2004 introduced in India Real Time Gross Settlement system, it is a Interlink Research Analysis system through which electronics instructions can be given by banks to transfer funds from their account to the account of another bank. The Real Time Gross Settlement system (RTGS) is maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a ‘Real Time’ basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary’s bank has the responsibility to credit the beneficiary’s account within a hours.

**ATM- Automatic Teller Machine**

Automatic Teller Machine is the most popular device in India, which enables the customers to withdraw their money 24 hours a day 7 days a week. ATM allows customer who has an ATM card in particular bank to perform routine banking transactions without cooperate with a human. In addition to cash withdrawal, Automatic Teller Machines (ATMs) can be used for payment of utility bills, funds transfer between accounts, deposit of cheques and cash into accounts, balance enquiry etc.

**EFT- Electronic Funds Transfer**

RBI (Reserve Bank of India) is the service provider of Electronic Funds Transfer. Electronic Funds Transfer (EFT) system is to make payment to another person/organization etc. banks makes cash payment or give instructions to transfer funds directly from his own account to the bank account of the receiver/beneficiary. Complete details such as the receiver’s name, bank account number, account type (savings or current account), bank name, city, branch name etc. The bank at the time of requesting for such transfers that amount reaches the beneficiaries’ account correctly and faster.

**Card Point of purchase**

Card Point of purchase is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transaction card that identifies the customer to the computer. During a transaction, the customer’s account is debited and the retailer’s account is credited by the computer for the amount of purchase.

**Core Banking**

Core banking is the common touch-point across all lines of business activity and functions of the banking sector, Commercial, Credit, Finance and Central Operations in India. Most contemporary core banking systems also address the automation needs of channels including branches and internet banking.

**Tele Banking**

Tele Banking facilitates the customer to do entire non-cash related banking on telephone. Under this devise Automatic Voice Recorder is used for simpler queries and transactions. For complicated queries and transactions, manned phone terminals are used.

**CRM- Customer Relationship Management**

Banks have understood that they have to put the customer of their thinking CRM Customer Relationship Management is the latest buzzword. Data mining has become an important tool for decision making by the management. Executive Information System (EIS) and Decision Support System (DSS) have become faster and more accurate through data mining. Some of them are Customer relationship management, field level sales force, help desk, call centres, interactive voice response systems, interactive television and e-mail.

**SMAC- The future of technology**

Exploring the transformation potential of the new generation of technologies available like Social media, Mobile, Analytics and Cloud **(SMAC)** new technology trends in Indian banking sector. The telecommunication, internet and mobility were significant enablers for banks in achieving extremely important business objectives revenue enhancement with cost efficiencies. In existing times, banking and the financial services industry.

**Social media**

The fundamental use that a social network can serve a financial institution is brand awareness. Financial institutions can engage the users of social media in different ways such as by displaying special offers and discounts, asking questions or conducting polls, displaying industry related news and opinions, etc. Engaging the social media users effectively can result in increase in awareness at a significantly lower investment compared to mainstream media.

**Opportunities for Indian Banking**

To observe Indian banks have performed more or less consistently with rapid strides being made in few areas with areas like IT, and Risk Management still “grey”. Indian markets provide growth opportunities, which are unlikely to be matched by the mature banking markets around the world. Increased use of information technology emerged as the key to meeting these challenges. Several measures were mooted at the level of the Government, the Reserve Bank and industry, which provided an impetus to adoption of technology in the banking sector. CBS implementation has made customer account maintenance seamless and enhanced data storage and retrieval capabilities tremendously. It has also enhanced the banks’ capacity to develop and market new products, as technology has increased information availability and the capacity for analysis and communication. Such capabilities and efficiencies are poised to rise further with the advent and adoption of evolving technologies like cloud computing and virtualisation, which have the potential to significantly bring down financial and management costs.

**Technological review in Banking**

Technological innovation enables banking and financial services, also enhances its capacity for continued and inclusive growth (Subbarao, 2009). Globally, the effect of IT on the banking industry has been positive. In general, studies have concluded two positive effects regarding the relation between IT and banks’ performance. First, IT can reduce banks’ operational costs(the cost advantage). Second, IT can facilitate transactions among customers within the same network (the network effect). Eyadat and Kozak (2005) examined the impact of the progress in IT on the profit and cost efficiencies of the US banking sector during the period 1992-2003. The research showed a positive correlation between the level of implemented IT and both profitability and cost savings.

**Milestones of the Banking Industry in India**

**Evolutionary Phase**

* Enactment of the RBI Act, 1935
* High levels of deprivation in economy

**Foundation Phase**

* Government adopted the system of planned economic development
* Establishment of Banking Regulation Act, 1949 & Complex Interest rates

**Expansion Phase**

* 14 banks in 1969 and 6 banks in 1980 were nationalized termed as First Banking Revolution‟
* Rapid branch expansion

**Consolidation968-1984/Expansion Phase**

* Lack of professionalism and transparency in the functioning of public sector
* Series of policy initiatives taken with the objectives of consolidation of banks**19**

**Reformatory phase-1991 onwards1990/ Consolidation1991**

* The Economic liberalization of 1990 was initiated to ensure an efficient, competitive and mature financial market
* RBI gave licenses to new private sector banks as a part of its liberalization process & Various guidelines
* FEMA, FERA,LAF were introduced
* Banking Laws( Amendment) Bill, 2011 passed

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**Trends and Opportunities in banking**

Technology has enabled the banks to conceive deliver, manage and integrate their products in line with the customers' need. A range of services is now provided to both retail and corporate customers covering different financial products, sweep-in/sweep-out facilities, channel financing, straight through processing, etc. to name a few. The multi-channel banking has acquired further dimensions to include third party payments, such as utility bills, through different channels including ATMs (the new ATM technologies come with nearly 150 types of offerings), mobile banking, etc. Further extension of RTGS in scope and width and the introduction of the cheque truncation systems should raise the customer expectation bar even higher. The day is not far off when the banks would be viewed more as technology companies offering banking products and services and services. While bank branches would continue to function, they would reorient themselves as relationship centers rather than routine banking service providers. More technology spends are expected in the near future on areas such as implementation of data centre, expansion of CBS, Business Continuity Plan (BCP)/Disaster Recovery Plan (DRP) installations, IT Security, Electronic Data Interchange (EDI), Storage solutions such as Storage Area Network (SAN)/Network Access Storage (NAS) to take care of the hundreds of terabytes of electronic data being generated, cheque truncation solutions, compliance to regulatory standards like Basel II implementations, customer Relationship Management (CRM) solutions, data ware house and data mining tools, channel integration, global treasury, performance monitoring tools etc. Another area of great interest concerns the mergers and acquisitions of banks wherein banks with techno-synergy can combine to benefit from the same. A case in point is the recent acquisition of Global Trust Bank by the Oriental Bank of Commerce. It is pertinent to note that, on an average, IT constitutes about 20% of the total expenditure of the banks.

**Findings**

Indian banking industry, today is an IT revolution. A combination of regulatory and competitive reasons has led to increasing importance of total banking automation in the Indian Banking Industry. The bank which used the right technology to supply timely information will see productivity increase and thereby gain a competitive edge. To compete in an economy which is opening up, it is imperative for the Indian Banks to observe the latest technology and modify it to suit their environment. Information technology offers a chance for banks to build new systems that address a wide range of customer needs including many that may not be imaginable today.

**Conclusion**

Indian banks sector around 80 % of market share do have taken lead in the field of technology. Banking sector Moving towards the centralized database and decentralize decisions making process desirable quality manpower. Awareness and appreciation of trends & technology are very much their joint with banking. What is needed is a ‘big push’ the way it was given in the post nationalization period for expansionary activities. Technology and bank have become synonymous. India becomes a destination for outsourcing or it becomes a development centre is matter of debate. As far as banking industry in India is concerned it can be said that although the Indian banks may not be as technologically advanced as their counterparts in the developed world, the majority of rising trends changing landscape of Indian banking sector.

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