

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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**GREEN BANKING SERVICES FOR SUSTAINABILITY**

**VIJAY PULICHERI**  
**CUSTOMER ASST.**  
**STATE BANK OF INDIA**  
**HYDERABAD**

**SANGEPU RAJASHEKHAR**  
**SCHOLAR**  
**DEPARTMENT OF BUSINESS MANAGEMENT**  
**OSMANIA UNIVERSITY**  
**HYDERABAD**

**ABSTRACT**

*Banking sector is the life line of the economy. Banking services have been evolving from the non eco-friendly to eco-friendly services. Technological developments played an important role in developments of green banking. The recent trends in customer preferences are directing towards green banking practices. The objective of the study is to know the emerging trend of the green banking in India. The difference between the manual and electronic transactions are to be disused. Green banking services includes online banking services, debit card, credit card, ATM services, Fund transfers (N.E.F.T/R.T.G.S), giving the gifts or credit points to the green customers etc. covered in this research. The research discovers how these services are helpful in satisfying the customers by reducing their queuing time for their transactions in the bank, travelling time from home to bank, saving the travel time and utilizing that time for other important activities. The other services are regarding secured online transactions, transaction settlements and sanctioning of funds etc. Indian banking sector consists of foreign banks, domestic banks (public and private), and other financial institutions. This study covers the recent developments in banking sector for sustainable development of the banking sector.*

**KEYWORDS**

Green banking- Foreign and Domestic Banks - Sustainable development.

**EVOLUTION OF BANKING SECTOR IN INDIA**

The banking sector in India has been evolving in different dimensions. Those dimensions were described in this study. Banking System in India is over two hundred years old. During the British period, majorly there were three Presidency Banks but in 1921 Imperial Bank of India (IBI) was formed by merging the three Presidency banks. Only in 1934, Reserve Bank of India (RBI) was formed by taking over the functions of a Central Bank of the country from Imperial Bank of India. In 1955, IBI was transformed into State Bank of India (SBI) 1955. Within two years of formation of SBI, seven subsidiaries which were the treasuries of the Kings in different regions were made part of State Bank Group. The State Bank Group (SBG) was given the primary responsibility of opening more and more rural branches and lending to the rural sector including agriculture, small business, etc.

Subsequently, with the two nationalizations in 1969 and 1980, twenty leading private banks were brought into the fold of Public Sector Banks (PSBs). The Indian Banking System also comprises the co-existence of Old and New Private Sector Banks, Foreign Banks, Cooperative Banks, Regional Rural Banks and Local Area Banks. The operations were mainly to attract deposits which were deployed in lending and investment in securities besides complying with RBI requirements. However, up to late 1980s, Indian Banking system was working on traditional lines. Apart from adopting archaic accounting principles, risk management techniques, etc., they were adhering to the administered interest rates of RBI and directed lending to identified sectors without concern for customer care, productivity and profitability parameters.

The economic reforms in India started in early nineties, but after about three decades, their outcome is visible now. It was such a coincidence that while the Indian economy suffered with shortage of Foreign Exchange Reserves in 1989-90 due to political and economic ills in India, banking sector became the target or victim thus becoming a subject of reforms simultaneously. Major changes took place in the functioning of Banks in India only after Liberalization, Privatization and Globalization. Due to reforms in the 1990s, the depth and width of financial system in India has improved and two PSBs were merged making the number down to nineteen. Though role of banks as financial intermediaries has reduced gradually, market share of banks continues to remain the largest in the financial market. Increased competition, new information technologies and thereby declining processing costs, the erosion of product and geographic boundaries, and less restrictive governmental regulations have all played a major role for Public Sector Banks in India to forcefully compete with Private and Foreign Banks. Healthy competition has set in among different banking players leading to efficient customer relations management.

It is interesting that Foreign Banks were operating in India for over a century. Even though, RBI liberalizing the licensing policy and enabling more Foreign Banks and their branches to be established / opened in India since 2005, there seem to be no much change in their market share. These banks are expected to be having attractive financial products, offering competitive service, world class working environment with technologically equipped manpower and quick decision-making. However, domestic banks have also competing with technology, competitive products and services offered. Several agencies started comparing the working of Banks in India on their performance over the past, through surveys.

Banks in India have become compliant to the mechanization followed by computerization and well net-worked. Technology was introduced in a progressive manner both at back-office and front office level in almost all the branches in rural, semi-urban, urban and metro centers. Gradually, ATMs, Internet Banking, Credit, Debit & Smart Cards and other facilities were made effective at all the bank branches. These changes and developments have benefited to all the customers. Banks are investing / spending huge funds for technology as well as training its staff in order to meet the changed work environment and Core Banking became order of the day. Banks are adapting to Risk / Asset Liability Management aspects and also compliance to Basel norms by attaining global standards.

**THE EMERGING TREND OF "GREEN BANKING"**

The term "Green Banking" is being heard more often today. Green banking can benefit the environment either by reducing the carbon footprint of consumers or banks. On-line banking is an example of an initiative of Green Banking. When a bank's customers go on-line, the environmental benefits work both ways.

While green banking can encompass a wide variety of banking services or policies, many banks are actively promoting their online banking services as a form of green banking. The environment and the banking industry can both benefit as more bank customers start to use the online banking services that are available. Benefits of online banking include less paperwork, less mail and less driving to branch offices by bank customers, which all have a positive impact on the environment. Interestingly, online banking can also increase the efficiency and profitability of a bank. A bank can lower their own costs that result from paper overload and bulk mailing fees if more of their customers use online banking. Green banking also can reduce the need for expensive branch banks. Green banking is also gaining importance in recent times. Most of the banks are undergoing computerization, networking, and offering of online banking to customers reduces the use of paper directly and indirectly resulting in pollution control.

Banks can also support eco-friendly groups, offer green lending and raise money for local environment initiatives. Banks that go to these significant lengths to be eco-friendly are a little more difficult to find than the banks that claim to be green by merely offering online services. Banks that offer rate incentives on Certificates of Deposits, money market accounts, online savings accounts and checking accounts for online banking also help the green banking cause by rewarding online banking customers.

All the above developments have definitely helped the transformation of banks in India during the last three decades. There has been a remarkable improvement in the working of banks in terms of cutting costs, increasing productivity, improving the profitability, controlling and management of the Non-Performing Assets (NPAs), face the risks, carry out the Asset Liability Management, manage the changes in interest rates, handle the foreign exchange rate fluctuations, comply with the regulator's requirements and finally improve the customer service to their best satisfaction.

## OBJECTIVES

- To know the concept of "Green Banking" in banking sector.
- To know the evolution of technologies towards green banking services
- To give the suggestions to improve green banking services in India.
- To create awareness on the new concept called Green Banking and its benefits to the society.

## SCOPE

This study emphasis is on public, private and foreign banks with reference to facilitating green banking services in India. The banks like SBI, PNB, Corporation Bank ICICI, HDFC, HSBC, etc. to be covered for the study.

## REVIEW OF LITERATURE

Green banking services helps the banks towards the sustainable developments of the banks. In this context many authors expressed their opinions on the previous and recent developments and trends in the banking sector relating to the green banking.

Jeucken (2001) highlighted important differences between regions, countries and banks with regard to sustainable banking. Jeucken identified four stages: defensive, preventive, offensive and sustainable banking.

Chowdari Prasad (2002) has studied the Impact of Economic Reforms on Indian Banking and suggested how banking sector will face the changes and challenges. Hopwood, 2005, highlighted the need for change it would be agreed that transformation in the usual model for the sustainable development is essential in order to understand the evolution of the banking sector towards sustainability.

Douglas (2008) found four key findings: (a) banks are increasingly discussing climate change business opportunities in their annual reports, (b) twenty eight of the forty banks have calculated and disclosed their greenhouse gas emissions from operations, (c) growing demand for climate friendly financial products and services is leading banks into new markets, and (d) investment banks have taken a leading role in supporting emissions trading mechanisms and introducing new risk management products.

Nigamanda Biwas (2011) interpreted Green Banking as combining operational improvements, technology and changing client habits in market place. Adoption of greener banking practices will not only be useful for environment but also benefit in greater operational efficiencies, a lower vulnerability to manual errors and fraud and cost reductions in banking activities. He stated that the concept of green banking will be mutually beneficial to the banks, industries and economy. Not only green banking will ensure the greening of the industries but it will also facilitate in improving the asset quality of the bank in future. He has listed several benefits of green banking.

Alice Mani (2011) indicated that as Socially Responsible Corporate Citizens (SRCC), banks have a major role and responsibility in supplementing governmental efforts towards substantial reduction in carbon emission. Bank's participation in sustainable development takes the form of GREEN BANKING.

The author examined and compared the green lending policies of banks in India in the light of their compliance and commitment to environment protection and environment friendly projects. It was opined that Banks in India can implement green lending.

Green Finance or Green Banking refers to diverse financial services and products provided by financial institutions for sustainable development (UNEP FI, 2007).

Green finance was firstly raised at the beginning of 1990's, when the United Nations Environment Program (UNEP) worked with industry to develop environmental management strategies that they were convinced that the financial industry maintaining their businesses might have a significant influence to the environment (UNEP FI, 2010). In fact, this concept has been mentioned for several years. But to date, it has not yet been normatively defined by any international bodies, as it depends on specific financial entity allocating capital to specific purpose with integrating environmental and sustainability factors.

There are some major concerns about environmental issues. Therefore, organization need to pay attention to their outputs whether they are violating environmental issues or not. At SBI Bank, it is believed that profit should not be earned at the expense of the world's most pressing environmental problems. That is why they finance organizations from organic food and farming businesses and pioneering renewable energy enterprises, to recycling companies and nature conservation projects.

Citizens Bank of Canada has lowered its interest rate on loans for carbon emission cars. These kinds of efforts will surely motivate other banks to promote green banking and consequently in long run environmental issues can be resolved.

## METHODOLOGY

This is an exploratory research. Data are collected from various sources pertaining to the topic of green banking. Chronological developments in the green banking industry is studied with respect to expansion of branches, implementation of computerization at different levels, opening of ATMs and other green banking services were made to understand the present status of Green Banking in India.

## GREEN BANKING SERVICES

Green banking services are the most important services to gain the competitive advantage. S.B.I. is the leading bank in public sector. ICICI is the leading bank in the private sector. Banking sector classification in India is based on the commercial and non-commercial activities. Management information system has been transforming the business by replacing non-green services to green services. The developments in information technology hardware and software have been making the banking services as more user friendly and eco-friendly. The integrity of information helped the banks to provide the following electronic services.

**ATM SERVICES:** John Shepherd-Barron devised what is hailed as the world's first automatic teller machine. First ATM in the world was installed by Barclays bank in London in 1967.

First ATM in India was installed by HSBC in Kolkata in 1987

First PSB to install ATM in India is Indian bank.

**DEBIT CARD:** The first debit cards were introduced in the early 1980's to enable consumers to obtain cash from ATMs by debiting their bank account.

Corporation Bank is the first Indian Bank to introduce debit card.

## EVOLUTION OF CREDIT CARD

The evolution process of credit cards has gone through the different stages those are:

**THE DINERS CLUB CARD:** It was the next step in credit cards. It is used mainly for travel and entertainment purposes, it claims the title of the first credit card in widespread use.



**PLASTIC DEBITS**

By 1951, there were 20,000 Diners Club cardholders. A decade later, the card was replaced with plastic. Diners Club Card purchases were made on credit, but it was technically a charge card, meaning the bill had to be paid in full at the end of each month.

**VISA AND MASTERCARD**

As credit card processing became more complicated, outside service companies began to sell processing services to Visa and MasterCard association members. This reduced the cost of programs for banks to issue cards, pay merchants and settle accounts with cardholders, thus allowing greater expansion of the payments industry.

**CREDIT CARD**

"The general-purpose credit card was born in 1966, when the Bank of America established the BankAmerica Service Corporation that franchised the Bank Americard brand (later to be known as Visa) to banks nationwide," Sienkiewicz writes.

As the bank card industry grew, banks interested in issuing cards became members of either the Visa association or Master Card association. Their members shared card program costs, making the bank card program available to even small financial institutions. Later, changes to the association bylaws allowed banks to belong to both associations and issue both types of cards to their customers.

**CHARGE CARD AND NO-ANNUAL FEE CREDIT CARDS**

American Express was among the first companies to issue a charge card, it wasn't until 1987 that it issued a credit card allowing customers to pay over time rather than at the end of every month. Its original business model focused on the travel and entertainment charges made by business people, which involved significant revenue from merchants and annual membership fees from customers. While these products are still in its tool chest, the company has developed numerous no-annual fee credit cards offering low introductory rates and reward programs, similar to as traditional bank cards.

**THE FUTURE CREDIT CARDS**

While the plastic card has been the standard for a half century, recent developments show alternative forms of payment rising to prominence, from online services such as PayPal to credit card keyfobs to chips that can be implanted into cell phones or other devices.

But with the sheer volume of devices in use around America whose sole purpose is to read a flat piece of plastic with a magnetic stripe, the "card" in "credit card" is unlikely to pass from the scene any time soon.

**VIRTUAL CARD**

A Visa prepaid virtual card is designed specifically for use on the internet.

When customers apply for a Visa prepaid virtual card, customer does not actually receive a physical plastic card. Instead the issuer will generally provide him/her with details of a card account, such as the card number, the expiry date and the security code, that you can then use to make purchases online.

**VISHWA YATHRA CARD**

State Bank Vishwa Yatra Foreign Travel Card' is a prepaid Foreign Currency Card which travelers going abroad are guaranteed to find useful. It is a Chip based Card which stores encrypted and confidential information.

State Bank Vishwa Yatra Foreign Travel Card is available in Eight Foreign Currencies viz.US Dollars (USD), Pound Sterling (GBP), Euro (EUR), Japanese Yen (YEN), Canadian Dollar (CAD), Australian Dollar (AUD), Saudi Riyal (SAR) and Singapore Dollar(SGD).

**GIFT CARD**

Gift Card is also a prepaid Indian rupee VISA CARD –an excellent substitute of Gift Vouchers.

**GREEN CHANNEL COUNTER**

The Bank had launched 'Green Channel Counter'(GCC) facility on State Bank Day (01.07.2010), at 57 select branches of the Bank spread across the country. This was an innovative step taken by the Bank towards changing the traditional way of paper based banking in a limited way, to card based 'Green Banking' focusing on reduction in paper usage as well as saving transaction time. This is a pioneering concept which would save both paper and time resources.

**ONLINE BANKING SERVICES**

Online banking services are helped the customers to reduce the carbon foot prints indirectly and make the convenience to the customer almost most of the important banking services. Some of these services do not require any manual intervention. Balance Enquiry

- Account Statement
- Fund Transfer to Self Accounts
- Third Party Fund Transfer
- Inter Bank Payee Fund Transfer
- PPF transfer
- Setting up Standing Instruction
- E-Tax Payment
- E-ticketing
- Bill Payments
- Visa Money Transfer
- eZ Trade
- Demat Enquiry
- Online Application for IPO.

**MOBILE BANKING SERVICES**

Mobile banking also known as M-Banking. M-banking is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS, a service known as SMS banking. With the introduction of the first primitive smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers.

**DISCUSSIONS**

Green Banking has been boosting to improve the environment and promoting economic growth. While the quantitative aspects have been tackled through IT intervention for efficient delivery of customer service and ensuring productivity and profitability, the concept of green Banking is deemed to have set in the banking industry, qualitative measures both within the system as also through implementation of certain policies to take care of environmental aspects. To reduce the In this context the study id required to Technological advancements have brought in Green Banking in the banks in India over a period which is certainly healthier in smooth and efficient functioning of the banking sector as also leading to customer satisfaction and clean environment. Green banking services are going to be soon as the strategic developments of the sustainable growth of the banks, banking industry as well as economy.

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