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RESEARCH ARTICLE

E-BUSINESS TRANSFORMATION IN BANKING INDUSTRY: OPPORTUNITIES AND VALUE ASSESSMENT.

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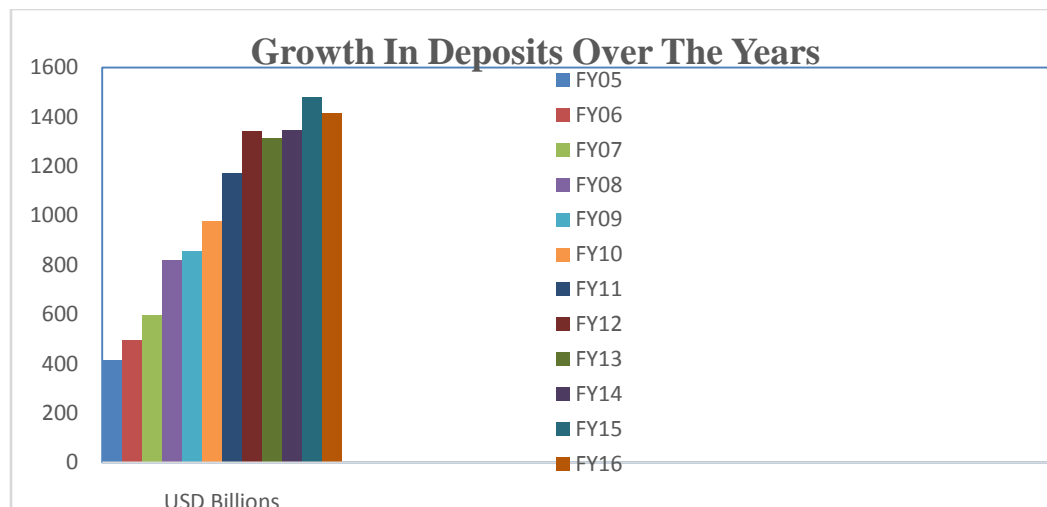
Abstract

While E-commerce has often been associated with “dot coms,” a major transformation is under way in many traditional organizations that are investing heavily in Internet technologies in order to improve financial performance. One such sector being the banking sector. The introduction of E-Commerce in the Banking Industry has had a significant impact on its operation both in physical branches and virtual transactions. Banks have made significant investment to transform their traditional businesses into e-businesses in the past decade to capitalize on the opportunities of business efficiencies. These banks adopted the Business to Consumer (B2C) e-business model to increase market share, offer better customer service and to reach out to customers at greater geographic distances. This paper is focusing on the role of e-commerce in improving banking services. The study objectives are to identify how developments in E-commerce are affecting the structure and dynamics of banks with specific emphasis on electronic business readiness of customers and suppliers, operational efficiency and financial parameters.

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Introduction:

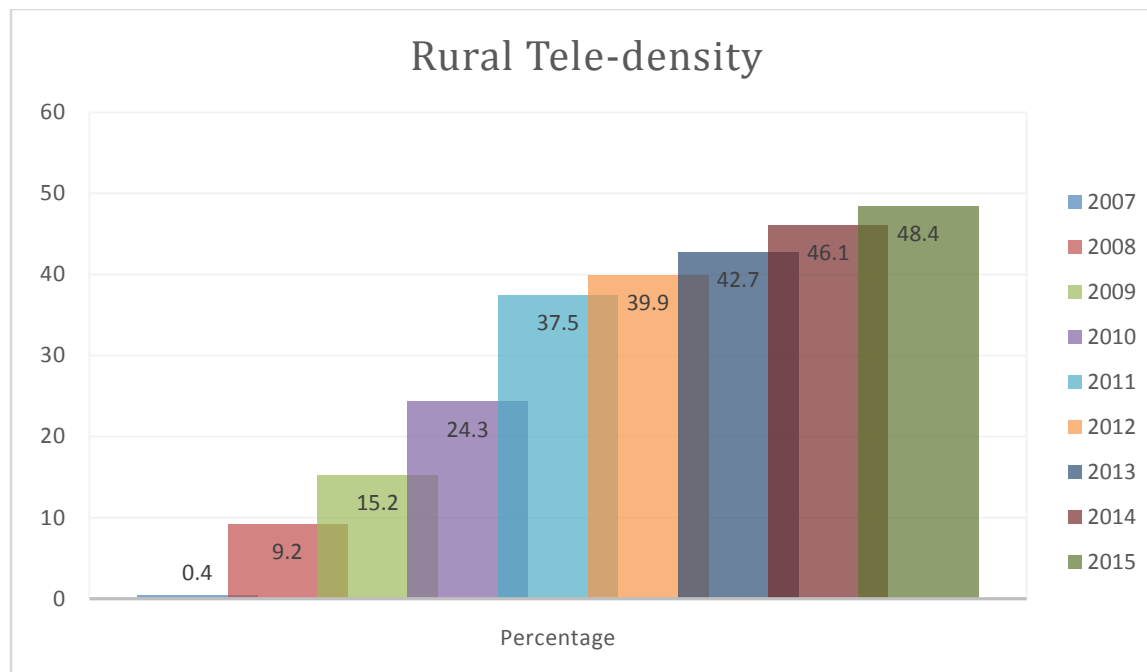
Most of the companies are endorsing “e-commerce” as a means of expanding markets, improving customer service, reducing costs, and enhancing productivity. Companies have traditionally used computers to manage their data. Now, however, the advent of electronic commerce and advanced networking technology, firms have been able to restructure their transactions with suppliers, distributors, and retailers through the real time sharing of information. Similarly, banks are also taking steps to increase efficiency by using networking technology in their business operations. E-banking transactions are much cheaper than branch or even phone transactions giving consumers much more choice. Traditional banks found it difficult to survive as not only were they unable to make acquisitions for cash or obtain additional capital from the stock market. E-banking is just banking offered via a new delivery channel as ATMs, mobile banking etc. The table given below shows the growth in deposits over the years.



Although the start-up costs of an e-bank are high yet retail banking only becomes profitable once a large critical mass is achieved. Technology adopted at various levels to enhance customer service has become an essential part of their functionality. In India, Banks protect margins by promoting usage of efficient technologies like mobile and internet banking and tend to increase income by cross-selling products to their existing customers. Increasing tele-density, and support of regulators have aided rural expansion. Around 44% people are using Net banking, which remains the most favourite mode of payment among internet users in India. Facilities such as fund transfer, account maintenance and bill payment at ATM stations have reduced the rush at branches ATMs in India are expected to double over the next few years The increase would take the number of ATMs per million population from 182 in 2015 to about 300 in 2017 (IBEF August 2015). With the rise in the disposable income, the need for banking services in rural areas is expected to increase and therefore drive the growth of the sector.

Transactions Cost:-

The banking industry is definitely among the service industries that has meticulously transformed during the past years. The direction of this transformation has been towards more efficient services at a wider range of cliental, supported by information and communication technologies (ICT). Industries have realized that in order to survive in market, they have to pace with innovation and creativity of products and services as well as the channels to deliver them. The transaction cost innovation theory pioneered by Niehans (2006) advocated that the dominant factor of financial innovation is the reduction of transaction cost, and in fact, financial innovation is the response of the advance in technology which caused the transaction cost to reduce. This theory is relevant in context to the use of Internet-connected Information Technology can substantially reduce a firm's transaction costs as it enables efficient coordination, management and use of information. Mols (1999) acknowledged that the internet banking is an innovative distribution channel that offers less waiting time and a higher spatial convenience than traditional branch banking with significantly lower cost structure than traditional delivery channels. Internet banking reduces not only operational cost to the bank but also leads to higher levels of customer satisfaction and retention. As a result internet banking is very attractive to banks and consumers, who now have higher acceptance to new technology. Mobile, Internet-connected IT may further lower transaction costs as it provides also off-site access to the firm's internal database and other relevant sources of information. Consequently, reduction of operation costs through agency banking, internet banking and mobile banking may influence growth in profitability for the bank. KPMG (2011) studied that in India, high mobile penetration and limited banking facilities are driving the growth of mobile banking in emerging markets like India where around 25-30% penetration is expected in 2020. With the changing trends, banks prefer servicing their customers at their doorsteps and at their convenience. This not only gives them an opportunity to service larger customer base but also reduce their transaction costs with least transaction cost via mobile banking-.08US\$, Online banking-.17US\$ and ATM-.85 US \$.

**Source:-**

Banks, telecom providers and RBI are making efforts to make inroads into the un-banked rural India through mobile banking solutions. Tele-density in rural India soared to nearly 48.4 per cent in April'15 from less than 1 per cent in 2007

Mobile The way to lead Delivery Channel:-

Today customers are just few clicks away from the fulfilment of their demands. With the help of innovative promotion, the relationship marketing approach enables the financial institutions to develop a more productive, customised and efficient interaction with its customers. RBI in its Payment System Vision document 2012-15, aims to promote a less cash/less paper society, with more focus on the use of electronic payment products and services, especially by the populace which is still not covered by these products.

Khanna and Gupta (2015) have emphasised that the competitive challenges have forced the banking and financial institutions especially the Public Sector Banks (PSBs) in India to change the delivery channels of their products or services. Ernest and Young(2011) have analysed that the establishment of a core banking platform has, however, given banks a strong launch pad to offer various services across alternate channels such as the web, mobile, call centres, ATMs, kiosks, and other systems, such as point of sale.

Joseph et al. (1999) examined the influence of internet on the delivery of banking services. They found six primary dimensions of e-banking service quality such as convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility and customization. KPMG(2011) in its report on transformation of E-business on banking industry has highlighted that **A Little World (ALW)** and its sister entity, a non-profit organization, **ZERO Microfinance and Savings Support Foundation (ZMF)** is around streamlining of the rural financial payments/ transactions conducted by public and private financial institutions in India. The mobile phone is in essence a 'bank in a box' run by ZMF for the villagers in rural India. The services currently offered include: cash deposits, withdrawals and transfers (as in bank saving accounts), payments for government social security programmes and welfare schemes electronically – what is generally called the Electronic Benefit Transfer (EBT), disbursement and collection of loans and loan instalments, collection of cash for third parties, insurance products and premium payments and payment of utility bills

Mobile banking across the world is still at a primitive stage with countries like China, India and UAE taking the lead. Mobile banking is especially critical for countries like India, as it promises to provide an opportunity to provide banking facilities to a previously under-banked market. RBI has taken several steps to enable mobile payments, which forms an important part of mobile banking; the central bank has recently removed the transaction

limit of INR50,000 and allowed banks to set their own limits. IBEF (2015) Mobile banking transactions in India will cross 340 million by 2015 and would result in cost savings of approximately INR11 billion (USD230 million). Report on Trend and Progress of Banking in India 2012-13 by Reserve Bank of India (RBI) indicates that the growth of electronic payments has been impressive in recent years. However, the benefits of modern electronic payment systems are not spread evenly among all sections of society and across the different regions of the country. Despite multiple electronic modes of payment being available, cash is still the preferred and dominant mode of payment in large parts of the country.

Risk assessment:-

The aftermath of financial crisis has led to an increased thrust on risk management from the RBI. The increasingly dynamic business scenario and financial sophistication has increased the need for customised exotic financial products. Banks are developing innovative financial products and advanced risk management methods to capture the market share. The integration of risk management and enterprise-level applications is still at introductory stages. Not many of the leading banks have implemented enterprise risk management systems and business intelligence capabilities to assist in risk-based strategic decision making. Many banks have introduced new payment products with different features for customer convenience as well as internal operational efficiency. While debit cards and credit cards have been in circulation for a very long time, the focus is on making them more secure and reliable through chips or even contact-less cards. Furthermore on the operational front, banks are trying to integrate channel infrastructure with help of payments hub to have better visibility on customer payments.

Security issues:-

A variety of issues prevent technology-enabled financial services from reaching their full potential to help India achieve the objective of financial inclusion such as the fear of technology. The lack of trust in technology or digital financial systems has become an obstacle in the development of technology-enabled financial services especially when there is very little awareness among customers about their usage. Regulators are concerned about the impact of technology-based financial inclusion models on systemic risk, since these introduce new risks such as electronic data security and new arrangements including outsourcing of specific bank functions (e.g., core banking ones). KPMG (2010) has analysed that information security has emerged as one of the priority areas of focus for banks. Banks have established the grounds for a strong information security framework by certifying against the ISO27001:2005 standards. Additionally, banks have implemented tools such as anti-virus, anti-malware, anti-phishing, log monitoring, etc. Some banks have also extended their coverage by implementing tools such as Data Leakage Prevention (DLP), Privileged Identity Management (PIM), Identity Management (IDM), Database Activity Monitoring (DAM), etc.

Readiness of suppliers:-

Nowadays most banks have invested in intranet portals, eLearning systems and institution training mechanisms. Trends for more informal learning mechanisms and the accessibility of information and subject matter experts at the click of a button, such as virtual classroom, blogging, chatting, discussion forums, helpline, also appear to be on the rise. Some banks have also gone a step ahead to ensure that their staff is incentivized to read the circulars and guidelines on the portal by scheduling monthly quizzes with cash awards. Banks often put these portals to best use to disseminate knowledge, training and publishing material on their core banking systems. One of the large banks effectively used this medium to increase user adoption of core banking to assist 1,500+ bank users to adopt a new way of working in less than three months without disturbing current operations. However, some of the banks have taken technology adoption to a new level by introducing gaming, simulation and mobile learning in the workplace. These smartphone applications were targeted at roles that needed a real-time, on-the-go access to critical product and process-related information. Thereby significantly enhancing the efficiency

Operational Efficiency and Financial:-

In the last few years, technology is being increasingly used by Indian banks at various levels such as, back-office processing, convergence of delivery channels, IT-enabled business process reengineering as well as communication with customers. According to IBEF (August 2015) Indian banks are currently allocating around 15 percent of total spending on technology. Spending on technology is expected to increase at an annual rate of 14.2 per cent and banks are set to benefit further as they move ahead in implementing additional technological advancements. Indian banking and securities companies have estimated to have spent USD8.89 billion on IT products and services in 2015, an increase of nearly 15.2 percent over 2014. Saluja & Wadhe have suggested that through reducing banking costs, electronic banking can increase bank incomes. The implication of their finding is that the ATMs are mainly used by

customers as compared to traditional branch system in India, because of the level of awareness of the product made by banks in India. Furthermore the result implies and concludes that higher the usage of E-banking instruments as ATMs in India, the better the profitability of the banks. Technology has allowed banks to increase their transactions volume with lesser man power and reduced costs (at the operational level). Furst et al. (2000a, 2000b, 2002a and 2002b) found that banks in all size categories offering Internet banking were generally more profitable and tended to rely less heavily on traditional banking activities in comparison to non-Internet banks. Sullivan (2000) found that click and mortar banks in the 10th Federal Reserve District incurred somewhat higher operating expenses but offset these expenses with somewhat higher fee income. On average, this study found no systematic evidence that banks were either helped or harmed by offering the Internet delivery channel. Hernando and Nieto (2005) examined the performance of multichannel banks in Spain between 1994 and 2002. The study found higher profitability for multichannel banks through increased commission income, increased brokerage fees and (eventual) reductions in staffing levels and concluded that the Internet channel was a complement to physical banking channels. DeYoung et al. (2006) observed that Internet adoption improved community bank's profitability, particularly through increased revenues from deposit service charges. Internet adoption was also associated with movements of deposits from checking accounts to money market deposit accounts, increased use of brokered deposits and higher average wage rates for bank employees.

Customer readiness:-

The rise of the middle class has also increased the number of households with internet connectivity. The affordability and penetration of the internet is growing rapidly across customer segments in rural and urban areas. Urban areas had a total of 205 million internet users in October 2013 that accounts for 40% YOY growth, while rural India have 68 million users and a growth rate of 58% YOY (IBEF August 2014). Banks are facing a major challenge where customers want multiple channels of interaction, but need to have the flexibility of changing their channels, depending on their convenience. Several banks have deployed best in class online and mobile banking features including personalization, bank wide customer relationship views and cross channel integration. Also customers are exposed to newer technology, which helps them to generate information by fewer clicks have to be focused on to provide value added services. However, branches continue to remain the primary service delivery channel for all banks. In many banks, we see very low customer migration to alternate delivery channels. There are several reasons for low adoption rates. The key issue is that many banks have large customer segments who are not computer savvy and still do not have access to the internet.

Khanna & Gupta (2015) have studied that Public Sector Banks (PSBs) need to understand the factors such as Technology acceptability, safety, availability, user friendliness and accessibility highly depends on the demographic profile of the population size. Haq and Khan (2013) have analysed that cyber banking is a progressive technology in India but its endorsement is very low as 70 percent population belongs to rural areas and 30 percent reside in urban. To reduce this low penetration, financial literacy of the users has to be increased through various programs run by the banks to increase the awareness of internet banking. There is still a lot needed for the banking system to make reforms and train their customers for using internet for their banking account.

Conclusion:-

The scope of E-Business is as wide as an ocean & there by the implementation hurdles. When one thinks of the Electronic Business even though final goal remains the same as that of the traditional business, but the way in which they function in order to improve the performance is different. As information sharing is the major part of today's business, E-commerce has given boost to the banking industry. Nationalized and Private banks agree that adopting e-business as a strategy is one of the important steps the banks has taken in its development due to the remarkable benefits e-business adoption provides. This change in view-point has opened door for new opportunities such as wider geographical reach, innovative financial instruments. Report on Trend and Progress of Banking in India 2012-13 by Reserve Bank of India (RBI) indicates that the growth of electronic payments has been impressive in recent years. However, the benefits of modern electronic payment systems are not spread evenly among all sections of society and across the different regions of the country. Despite multiple electronic modes of payment being available, cash is still the preferred and dominant mode of payment in large parts of the country. In India, the rural population is still untapped market because they are not yet financially literate. There is still a lot needed for the banking system to make reforms and train their customers for using internet and mobile for their banking account. Banks have invested in intranet portals, eLearning systems and institutional preparation with a combination for more informal learning techniques such as virtual classroom, blogging, etc. to disseminate knowledge, training on their

core banking systems. Thus, E commerce has transformed the way banks conduct their business, be it by means of diversity in the delivery channels or by means of innovation revolutionary financial instruments.

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